



Staff Report to the Planning Commission

Application Number: **98-0809**

Applicant: Graniterock

Agenda Date: September 14, 2005

Owner: Graniterock

Agenda Item #: 7

APN: 059-041-26, -27, -30, -31 & 059-141-04, -05, -09

Time: After 9:00 a.m.

Project Description: Permit Review for compliance with conditions of Certificate of Compliance and Reclamation Plan Approval 92-0331 for the Graniterock Wilder Sand Plant. Minor Mining Approval Amendment to include: eliminate geologic monitoring of slopes, additional hours of operation for maintenance, reduce fencing requirement, revise the process water system and backfill the mining pit; includes amended mining plans and revegetation plan.

Exhibits:

- A. Amended Mining Plans
- B. Proposed Changes to Conditions of Approval
- C. Conditions of Approval with Changes Incorporated
- D. Permit Review
- E. August 25, 2005 Memo

Introduction

Condition II.I of the Certificate of Compliance and Reclamation Plan Approval 92-0331 for Graniterocks Wilder Sand Plant requires that your Commission review this permit every five years. This is the first such review since the quarry reopened in 1998. As you may recall this matter was originally scheduled for consideration by your Commission on July 27th of this year. Just days before that scheduled hearing, staff discovered that one of the fill slopes at the quarry had experienced a failure last winter. Not only did Graniterock fail to notify the Planning Department of this event, they undertook major repair work without permits or technical input from the County. As a result, Graniterock was required to submit information to document that this as-built work conforms to County Code and SMARA standards by August 10th. Consideration of the Five-year Review and request for a Minor Amendment was continued to today's agenda.

While the original staff report distributed to your Commission for the July 27th hearing included a recommendation to approve a Minor Amendment to Wilder Quarry Certificate of Compliance and Reclamation Approval 92-0331, the occurrence of the events described above have resulted in a change to this recommendation. We now believe that, given the number of permit compliance-related issues associated with the Wilder Quarry operation, additional measures should be taken by the County to ensure improved compliance in the

future. A discussion of available options to improve compliance is included later in this report.

The following analysis and discussion address the compliance review, and includes a brief history of the issues currently affecting the quarry.

Background

Graniterocks Wilder Sand Plant(Wilder quarry) is located at 1802 Coast Road (Highway 1) approximately 1 1/2 miles west of the Santa Cruz city limit (Exhibit A, Sheet 1). Hydraulic sand mining utilizing well water began at the site in 1967 under Use Permit 2791-U. In June of 1990, Graniterock ceased mining operations at the quarry pending approval of a Certificate of Compliance(COC) and Reclamation Plan by the County of Santa Cruz.

In December of 1996 the Planning Commission certified the EIR for the project and approved the COC and Reclamation Plan(1996 COC). Prior to the resumption of mining, however, Graniterock was required to prepare a Habitat Conservation Plan(HCP) and to obtain an "incidental take" permit from the United States Fish and Wildlife Service (USFWS) in order to mitigate for impacts to the federally threatened California red-legged frog. Graniterock obtained their "take" permit from the USFWS on June 19, 1998 and the Wilder Sand Plant resumed operations in July of 1998.

In order to ensure consistency between the County and federal approvals, the Conditions of Approval for the 1996 COC require that, upon approval of the HCP and associated federal permit, Graniterock shall amend the 1996 COC as needed to incorporate the requirements of the HCP. In order to determine the scope and nature of the amendments needed, staff compared the two approvals. However, due to changes to the project during mining operations, the scope and nature of the amendments needed has changed.

1996 Certificate of Compliance and EIR

The project approved under the 1996 COC allowed Graniterock to resume mining within an approximately 60-acre area of the overall 300-acre property (Exhibit A, Sheet 14). The mining operation consists of excavating and processing sand from a portion of an uplifted marine terrace within the Santa Margarita Formation over a fifteen-year period at a maximum rate of 250,000 tons per year. The Mining Plan indicates removal of material to a depth of 120 feet below the surface by progressing through the terrace from southeast to northwest.

Water used during the sand washing process is circulated through a portable processing plant and settling ponds to separate and classify sand, silt and clay by particle size. Although this process recycles water, losses due to evaporation and infiltration require input of additional water, which is supplied by a well. In addition to the settling function, the ponds within the mining area collect and store storm water runoff from the mining area preventing sediment-laden runoff from entering Old Dairy Gulch or Sandy Flat Gulch. Dust

is controlled with application of water and the facility is screened from Highway 1 by a grove of trees along the frontage. Hours of operation and shipping restrictions are specified in the 1996 COC.

One of the most significant aspects of the project is the operation of a mine within habitat for California red-legged frog, listed under the federal Endangered Species Act as threatened. In addition to red-legged frog protection measures, other aspects of the 1996 COC are intended to ensure long-term slope stability and surface drainage control, and timely and appropriate revegetation. The EIR mitigation measures called for the Reclamation Plan to be revised to incorporate red-legged frog habitat characteristics into the ponds, but recommended waiting until the HCP was completed so that any refinements or additional requirements of the USFWS could be incorporated into the plan at one time.

The 1996 COC approval describes reclamation in two phases: Phase one addresses reclamation of previously mined areas (1967-1990) and measures to mitigate impacts on red-legged frogs from ongoing mining and reclamation activities; phase two addresses concurrent reclamation of the proposed mining area. Major elements of the first phase include: removal, replacement and upgrade of numerous drainage culverts on the site; revegetation of previously mined areas; and enhancement of existing ponds located outside the mining area. During mining, water level fluctuation and management of sediment and vegetation in quarry operational ponds, including storm water ponds and settling ponds, would follow specific guidelines for maintenance of red-legged frog habitat. The second phase of reclamation includes revegetation of the mining area and the ponds used during mining. After mining, ponds located both inside and outside the mining area previously proposed for removal would be retained and maintained as red-legged frog habitat.

1998 Habitat Conservation Plan

Significant new requirements and more detailed avoidance, minimization, and mitigation measures resulted from the 1998 HCP. Two requirements in particular had a significant effect on the operation of the mine. The HCP placed restrictions on the use of the clarifier, which eliminated an important aspect of the process water handling system. In addition, the HCP prohibited the planned removal of existing deposits from one of the settling ponds.

The balance of the HCP requirements closely follow the mitigation measures identified in the EIR. However, unlike the EIR, the HCP provides a quantitative analysis of the impacts to red-legged frogs and describes specific measures to retain and enhance cover, foraging, and breeding habitat in pond locations both inside and outside the mining area.

In summary, the HCP describes a combination of measures to avoid, minimize and mitigate impacts to red-legged frogs from the project. In general, these measures include habitat enhancement and creation projects outside the mining area, and avoidance and minimization measures within the mining area during mining operations.

As a result of the development of the HCP, changes to the plans approved under the 1996 COC were needed to reconcile the two documents. These changes were specifically required to the Reclamation Plan, including the mining plan and revegetation plan, to show the revised water circulation system and to incorporate the additional red-legged frog habitat requirements.

Compliance Issues

Graniterock has incorporated some, but not all, requirements of the EIR and HCP into operation of the mine. In addition, as the mining operation has proceeded, further changes have occurred that are inconsistent with the EIR and HCP. A summary of the inconsistencies between the current mining operation and the HCP, the EIR, and other aspects of the 1996 COC are described below:

Ponds

There are three main settling ponds located on the property that have been used historically. Two of the settling ponds (104 and 105) are located on the south side of Highway 1 and one (106) is located on the north side of the highway (Exhibit A, Sheet 15). Large deposits of fine-grained material remain in these ponds from the mining activities that occurred between 1967 and 1990.

With respect to the settling ponds, under the 1996 COC and EIR and the 1998 HCP the project description included: 1) use of the pond on the north side of the highway (106) and only one of the ponds on the south side of the highway (104), 2) sale of existing deposits stored in these two settling ponds, and 3) sale of pond deposits produced annually during mining as market conditions allow. The approval documents contain no discussion of a contingency plan in case the pond deposits are not marketable to the extent originally envisioned, as has proven to be the case. In addition, restrictions imposed by the HCP prohibited the planned harvest of material from pond 104.

The 1996 COC approval reflected Graniterock's intention to utilize only one of the two clarifiers in conjunction with the two settling ponds described above. However, restrictions imposed by the HCP prohibited use of the clarifier. The restrictions imposed by the HCP combined with the lack of a market for both the pre-existing pond deposits and the deposits produced annually, and high production levels resulted in a lack of adequate settling and storage capacity in the ponds. **As** a result, Graniterock eventually began to use the second settling pond (105) on the south side of Highway 1. The project description for the EIR and the HCP indicated that this pond would not be used, but would be allowed to naturally revegetate with willow riparian vegetation to provide cover and forage habitat for red-legged frogs. Use of this pond has now ceased. Currently, the pond contains some seasonal water and some vegetative cover, and monitoring reports indicate that red-legged frogs have been breeding in this pond.

The HCP required establishment and maintenance of riparian vegetation around the margins of settling ponds. The quarry's consulting biologist responsible for monitoring the mine for compliance with the HCP recommended in the first monitoring report for 1998 that it would be best to leave the ponds free of vegetation during the operations stage to reduce the likelihood that the ponds will be an "attractive nuisance" to red-legged frogs. Both the County and the USFWS have accepted this as a valid concern. This practice, however, is inconsistent with the EIR and HCP.

The analysis in both the EIR and HCP was based on protection of red-legged frog habitat characteristics in operational ponds, which is not occurring as envisioned in the EIR and HCP. Therefore, the affects of the project on red-legged frogs, with respect to operational quarry ponds, must be reanalyzed based on the actual site conditions. County staff has worked with both Graniterock and USFWS to address the issues of noncompliance with the HCP. Graniterock has submitted remediation plans to USFWS that indicate steps taken to comply with the HCP and a willingness to provide additional red-legged frog habitat as mitigation for past and future effects. Subsequently, the USFWS has chosen not to suspend the "take" permit at this time. However, an amended HCP is needed as soon as possible.

Backfilling

As noted above, the original project description assumed that existing deposits stored in settling ponds and pond deposits produced annually during mining would be marketable, and that permanent on site storage would not be necessary. Little, if any market for this material actually exists, however. All of this "unmarketable material" from the ponds and the processing plant is currently stored on site within the mining excavation area. Deposition of material in this location is inconsistent with the 1996 COC. An evaluation of this backfilling is provided in the Permit Amendment section of this staff report, which includes a recommendation that the Commission approve a Minor Mining Approval Amendment to incorporate this change into the Reclamation Plan.

Mining Progression

Graniterock has not minimized the area of disturbance at Wilder Quarry in accordance with the approved mining plans. The mining envisioned in the 1996 COC and EIR, and per the approved Exhibits, was to occur in three phases from southeast to northwest, utilizing a bulldozer and loader. Instead, mining has occurred on all phases simultaneously, from top to bottom, utilizing belly-loading scrapers. Within the first five years of operations, mining has occurred within 90% of the approved mining area, including locations within the five, ten, and fifteen-year mining areas.

Planning staff informed Graniterock to discontinue mining outside of the approved five-year area in March 2002. Graniterock has complied. Revegetation and erosion control measures have been applied to the disturbed portions of the 10 and 15-year areas and Graniterock has limited mining to the 5 and 10-year areas. Mining operations in the 5-year

area are complete and backfilling and revegetation efforts in this first phase are underway, including the establishment of revegetation test plots. At this time, phased mining operations are essentially back on track according to the approved mining progression plans.

Overproduction

Wilder Quarry exceeded the production limit in 2000 and 2001. In order to rectify the violation created by the increased mining for the year 2000 and 2001, the County required that mining be reduced in the year 2002 by the amount that was over the tonnage limit of 250,000 tons in the years 2000 and 2001. While Graniterock reduced production at the facility in 2002, it did not completely offset the over production that had occurred over the course of the previous two years. This balance was achieved in 2003, when production was, again, below the maximum allowed by the permit. Therefore, at this time Graniterock has reduced production by an amount that accounts for the overproduction in 2000 and 2001.

Fill Slope Erosion

In February 2005 significant gully erosion occurred on an approximately 75-foot high fill slope on the southwest side of settling pond 106. Eroded material formed alluvial fans at the toe of the slope extending into Sandy Flat Gulch, which resulted in the deposition of a significant amount of sediment into Sandy Flat Gulch. The erosion is not readily visible from within the operational mining area. During field work to monitor California red-legged frogs the erosion was discovered by the quarry's consulting wildlife biologist and reported to Graniterock. Subsequently, Graniterock installed sediment control measures, obtained recommendations for repair of the slope from a geotechnical consultant and began the repair work. The erosion and ongoing slope repair work was not reported to the County, but was discovered by County staff in July 2005 while photographing the site from a prominent overlook.

Storm water runoff was not controlled as required to prevent erosion and prevent the deposit of sand and silt into Sandy Flat Gulch. The level of impact from this incident on water quality in Sandy Flat Gulch cannot be quantified because real time monitoring data do not exist. In addition to reinforcing the requirement to monitor storm water runoff control measures, staff is proposing to modify existing condition III.B.6 to require the installation of devices to continuously monitor water quality by an independent consultant with results submitted to the County every thirty days during the winter period (October 15 through April 15) and in the annual report (Exhibit B).

Without notifying the County of the original erosion problem or the repair work Graniterock reconstructed the slope steeper than 2:1 (horizontal: vertical) with no geologic and engineering analysis to demonstrate that the final slope will have a minimum factor of safety that is suitable. The County Geologist and Planning Department Senior Civil Engineer have reviewed information on the erosion and slope repair prepared by

Graniterocks geotechnical consultant and have provided recommendations to essentially redo the repair and further investigate slope stability throughout the Pond 106 embankment slopes. Staff is also proposing a new condition to make it clear that any future unforeseen circumstances are immediately reported to the County (Exhibit B).

On August 9th, the Planning Department received information from Graniterock regarding the design and construction of the slope repair work. Following a review of this material Planning Department staff have found it to be inadequate, and significant questions remain about the design, construction methods, and long-term stability of the reconstructed slope. These concerns were communicated to Graniterock in a memo dated August 25, 2005 (Exhibit E).

Permit Review

In addition to the compliance issues discussed above, a complete review of permit compliance is included in Exhibit D. As part of the permit review further discussion of two important issues is provided below.

Groundwater

The Santa Margarita Sandstone is the primary water-bearing geologic unit in the project area and is the target of mining operations. Throughout the mining area on the north side of Highway 1 the Santa Margarita outcrops at the ground surface where the overlying Santa Cruz Mudstone has been eroded away. Because groundwater recharge occurs in the area on the north side of Highway 1 where the mine is located, protection of the quality and quantity of water recharging the aquifer is an important project issue.

The project approved under the 1996 COC includes a number of measures to protect the groundwater resource, including a hazardous materials management plan, erosion control and drainage measures, limits on groundwater pumping, and a groundwater monitoring program.

In 1998, shortly after mining began, the County became concerned about groundwater separation and required Graniterock to conduct further hydrogeologic studies into groundwater elevation trends, groundwater geochemistry and current and potential impacts of site operations on groundwater conditions. Numerous groundwater studies have been completed on the site to evaluate these issues and to ensure that the minimum 20-foot separation between mining operations and groundwater continues to be maintained.

These studies conclude that mining excavation is not occurring in areas of shallow groundwater. Where shallow groundwater does exist, beneath the sand plant and the lower portions of Old Dairy and Sandy Flat Gulches, this is a pre-existing natural condition and no mining excavation is occurring in this area. Current site operations do not negatively impact groundwater quality and are unlikely to affect future groundwater quality. Recently, exploratory pits 20 feet deep have been excavated in the mining floor, confirming

the absence of shallow groundwater. This type of monitoring to ensure the maintenance of at least 20 feet of separation to groundwater will continue as mining progresses, as well as required regular monitoring of groundwater quality.

Revegetation

Revegetation has been implemented in the following areas: Habitat compensation area; landscape screening area; revegetation and erosion control at culvert construction sites; and removal of invasive non-native plants. In addition, Graniterock, in conjunction with the new revegetation consultant, has implemented revegetation on the finish floor and side slopes of the five-year mining area, including the establishment of test plots.

Other elements of the revegetation plan have not been implemented, including revegetation of operational ponds, and enhancement of grassland and coastal scrub plant communities in previously mined areas as envisioned in the plan. Revegetation has fallen short of the success criteria in the approved revegetation plan. However, a new revegetation consultant for Graniterock has concluded that an update of the success criteria is warranted and the revegetation plan should be revised. The consultant has prepared an amended revegetation plan, which recommends a new planting plan and success criteria that will be consistent with the vegetative cover in naturally occurring habitats in the area surrounding the quarry. The amended plan is consistent with the requirements of SMARA and County Mining Regulations. The previously certified EIR did not identify loss of nonnative, annual grassland due to mining activities as a significant adverse impact. Therefore, a change in the species composition in the revegetation plan does not constitute a substantial change to that document.

The outstanding issue in the revegetation plan is the performance standards for red-legged frog habitat in the ponds. Ponds located outside the mining area have been revegetated and are functioning as red-legged frog habitat. As a result of confusion regarding the performance standards in the HCP, the amended plan defers to the wildlife biologist monitoring red-legged frogs to assess any future need for vegetative changes to these ponds. The wildlife biologist does not recommend any vegetative changes at this time. At the completion of mining, the ponds located inside the mining area will become available for revegetation. Until an HCP amendment is approved by the USFWS it is not known exactly what changes, if any, may be needed to the amended revegetation plan and performance standards. We envision that revisions to the revegetation plan will be included with the major permit amendment necessitated by changes to the HCP.

As a result of this permit review, the compliance issues and the changes in the scope of operations, new conditions are recommended. Your Commission may approve these new conditions in conjunction with approval of a Minor Mining Approval Amendment or provide additional direction to staff. Changes to the existing Conditions of Approval are listed in Exhibit B and a complete set of the new conditions, including these changes, is listed in Exhibit C.

Permit Amendment

As noted, as a result of the development of the HCP, changes to the Reclamation Plan approved with the 1996 COC were needed to reconcile the two documents. Changes to the mining plan and revegetation plan were needed to show the revised water circulation system and to incorporate the additional red-legged frog habitat requirements.

In anticipation of the changes to be required by the HCP, in April 1998 Graniterock revised the mining plan to incorporate changes to the configuration of two storm-water settling ponds and the overall water circulation system. The revised plans were approved under a Minor Variation. However, the 1996 COC and Reclamation Plan have never been formally amended to incorporate all of the requirements of the HCP into operation of the mine. As required, Graniterock submitted an application for an amendment to the 1996 COC in September 1998. A number of proposals to revise the Reclamation Plan, including the mining plan and revegetation plan have been submitted as part of the application, but none have satisfactorily incorporated all of the requirements of the EIR and HCP. In addition to a determination that the application was incomplete, the County required Graniterock to conduct further groundwater studies before proceeding with the amendment application. The groundwater studies, discussed above, have proceeded while the amendment application has remained incomplete. Finally, because of changes to the mining operations project during review of the application, the scope and nature of the amendments needed has changed.

Major Amendment

The compliance issues summarized above, involving ponds and red-legged frog habitat, are complex. As noted, County staff has worked with both Graniterock and USFWS to address the issues of noncompliance with the HCP. Graniterock has submitted remediation plans to USFWS that indicate steps taken to comply with the HCP and a willingness to provide additional red-legged frog habitat as mitigation for past and future effects. Subsequently, the USFWS has chosen not to suspend their Section 10 Incidental Take Permit at this time. However, an amended HCP is needed as soon as possible. In addition to an amended HCP, the changes to the function, maintenance, reclamation and revegetation requirements of the ponds will require a Major Mining Approval Amendment. The exact scope and nature of the necessary changes involving the ponds and red-legged frog habitat will not be known until an HCP amendment is approved by the USFWS.

Graniterock is in the process of developing the amended HCP document for submittal to the USFWS and anticipates completing the draft document no later than October 31, 2005.

Accordingly, a new permit condition (Exhibit C) is proposed that requires Graniterock to submit an application for a Major Mining Approval Amendment by the same date. The amended HCP will primarily address red-legged frog habitat issues related to ponds (cover, forage and breeding habitat). The location of ponds is shown on the amended plans (Exhibit A, Sheet 14) and this is unlikely to change significantly, except that an additional pond(s) may be proposed or required. In addition, we envision that revisions to the

revegetation plan will be included with the major permit amendment necessitated by changes to the HCP.

Minor Amendment

With the exception of the pond/red-legged frog habitat issues requiring an HCP amendment and Major Mining Approval Amendment, all of the other permit compliance issues described above have either already been resolved or are incorporated into the amended plans (Exhibit A) and new permit conditions (Exhibit B). As stated, Graniterock has an active application (98-0809) on file with the County, which is a request to amend the 1996 COC. Although a large volume of information has been submitted in support of Application 98-0809 it has remained incomplete until recently. After a number of iterations the County has received the information necessary to proceed with a Minor Mining Approval Amendment application. The project description for Application 98-0809 is a summary of the minor amendment items and includes: elimination of geologic monitoring of slopes, a request for additional hours of operation for maintenance, a reduction in the fencing requirement, a revision in the process water system and a request to backfill the mining pit.

Geologic Monitoring

Conditions III.A.6 and III.A.8 require Graniterock to have an engineering geologist conduct regular investigations of the quarry slope and submit monthly and annual reports regarding slope stability. Graniterock has submitted the reports as required, which have consistently shown that the quarry slopes appear to be stable and the operation is proceeding in a safe manner. Graniterock is requesting removal of this condition because it is a remnant from the original proposal of campground use concurrent with mining. While County Mining Regulations do not typically require this type of monitoring, the permit conditions are a remnant of the original proposal and a concern regarding campers potentially in close proximity to the mine excavation. With no campgrounds there is no need for this level of monitoring. Therefore, staff recommends deleting these conditions.

Hours of Operation

Graniterock is requesting that Condition III.1.3, which limits maintenance operations to the hours of 5:00 am and 8:00 pm Monday through Friday, be amended to allow maintenance operations on Saturdays between 7:00 am and 3:00 pm. Again, the condition is a remnant of the original project description, which included campgrounds and concern regarding exposure of campers to mining activities on weekends. With no campgrounds it appears reasonable to allow maintenance operations (no trucking) on Saturdays during the requested hours. Therefore staff recommends approval of the request Saturday maintenance hours.

Condition III.1.2 states that shipping operations shall be confined to between the hours of 5:00 a.m. to 7:00 a.m., with reduced shipping at the rate of two trucks per hour allowed

during 7:00 a.m. to 9:00 a.m., resuming normal shipping at 9:00 a.m. to 3:00 p.m. for shipments through the Mission Street corridor Monday through Friday. Shipments northward may occur during 5:00 a.m. to 3:30 p.m. Monday through Friday. Graniterock is requesting complete elimination of the limit on shipping between 7:00 am and 9:00 am. Although Graniterock has submitted some information on current traffic conditions, more information and analysis is necessary to determine the impacts of new truck traffic that would result if the limit on quarry trucking between 7:00 a.m. and 9:00 a.m. were completely eliminated. Therefore, at this time staff recommends denial of the amendment request to eliminate shipping restrictions between 7:00 am and 9:00 am.

Fencing

Condition III.J.1 requires fencing the entire mine site in accordance with County Mining Regulations. The applicable section of the County Code is 16.54.050.c.11, which states that the entire mining site shall be fenced for safety and maintained by the owner or operator, to the extent and in the manner required by the Planning Commission. Graniterock is proposing that fencing is not needed in certain areas surrounding the mine because vegetation and terrain provide an adequate barrier. The nature of the topography (steep gulches) and vegetation (thick brush and poison oak) surrounding portions of the mine make it essentially inaccessible and fencing these areas does not appear necessary.

County staff is not aware of any trespassing problems at the mine. Therefore, staff recommends approval of an amendment to this permit condition allowing gaps in the fencing as appropriate based on field conditions and approval of Planning Department staff. Fencing of the balance of the mine site has been completed.

Process Water System

The amended plans accurately reflect the existing process water system (operational ponds), including the temporary pond within the mining pit. The current operation actually utilizes fewer ponds and appears to be a more efficient operation within a smaller footprint than originally approved. As noted, the current management of the operational ponds is not in compliance with the HCP. However, the USFWS agrees that simultaneous management of ponds for settling activities and as red-legged frog habitat may not be appropriate. This issue will be resolved through the HCP amendment/Major Mining Approval Amendment process. Staff is therefore prepared to recommend approval of the amended plans as they relate to the process water system.

Backfill

Because the mine is located within a groundwater recharge area, the potential impact of backfilling the mine pit with "unmarketable" fine-grained material must be evaluated. A hydrogeological consultant performed this evaluation and estimated the percolation (or infiltration) rate in the reclaimed backfill area by direct measurement and indirectly by calculations based on sieve analysis. The consultant concludes from the permeameter measurements and the sieve analysis that the backfill material is not significantly different

than the native material and there is no obvious effect on groundwater recharge. The County Geologist and the Planning Department Senior Civil Engineer have reviewed and accepted the consultant's report. Unlike the native material, the backfill material is uncompacted and may allow for quicker recharge. Therefore, the change to the mining operation involving backfilling of the pit will have no significant impact on the environment and may actually be beneficial for groundwater recharge. For these reasons, staff recommends approval of this change to the Reclamation Plan.

Revegetation

The Minor Mining Approval Amendment request includes an amended revegetation plan. As discussed the amended plan is consistent with County Mining Regulations and SMARA. Therefore, staff is recommending approval of the amended revegetation plan. However, the outstanding issue in the revegetation plan is the performance standards for red-legged frog habitat in the ponds. Until an HCP amendment is approved by the USFWS, it is not known exactly what changes, if any, may be needed to the amended revegetation plan and performance standards. We envision that additional revisions to the revegetation plan will be included with the major permit amendment necessitated by changes to the HCP.

Options for Improved Compliance

As previously stated, due to the number of condition compliance issues at the Wilder Quarry since the resumption of operations in 1998, staff believes that additional measures should be taken to ensure that mining is conducted in compliance with conditions established by the 1996 COC. In addition to the staff recommendations provided above several additional options appear to be available to improve condition compliance at Wilder Quarry:

- Direct the staff to explore use of provisions contained in Section 16.54.090 of the Mining Ordinance regarding issuance of an "order to comply" to correct non-compliance issues. This Section contains remedies for failure to obey such an order, including initiation of permit revocation proceedings.
- Explore decreasing the cap on annual production, with provisions to incrementally increase the production amount as certain compliance milestones are met.
- Direct staff to develop a Condition of Approval requiring Graniterock to prepare a semi-annual compliance report for review by the Planning Department and submission to the Planning Commission on your consent agenda.

Staff does not have a recommendation relative to these options for improved condition compliance. We are requesting that your Commission discuss these options and direct staff to return with an additional condition or conditions to implement one or more of these items, if you determine that such a course of action is appropriate.

Conclusion and Recommendation

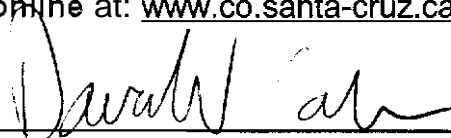
As a result of the analysis and discussion above staff recommends that your Commission take the following action:

1. Hold a public hearing on the Five-Year Permit Review for the Graniterock Wilder Quarry;
2. Provide direction to staff regarding measures to improve condition compliance:
3. Direct staff to return on October 12, 2005 for consideration of a Minor Mining Approval Amendment, as described in this letter; and,
4. Direct staff to return on October 12, 2005 with a recommendation to ensure no unnecessary delays in processing the Major Mining Approval Amendment application, to be submitted no later than October 31, 2005.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

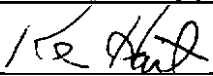
The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

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Changes to Conditions of Approval

Certificate of Compliance and Reclamation Plan Approval, #92-0331

1. Delete Conditions I.B through I.J., which reference the old mining plans and revegetation plan and replace with new conditions I.B and I.C referencing the new mining plans and revegetation plan.
2. Insert a reference to an amended HCP in Conditions II.C, III.A.1, III.D.4, III.D.6 and III.D.8.
3. Add new Conditions II.R and II.S regarding an application for an amended HCP and a Major Mining Approval Amendment.
4. Delete Conditions III.A.6 and III.A.8 regarding geologic monitoring of slopes. The conditions in this subsection are renumbered accordingly.
5. Amend Condition III.I.3 to add Saturday maintenance hours.
6. Amend Condition III.J.1 to add language allowing staff approval of gaps in fencing.
7. Modify Condition III.B.6 to require the installation of devices to continuously monitor water quality in Sandy Flat Gulch and Old Dairy Gulch immediately upstream and downstream of the mine. The operator shall submit a plan for the continuous monitoring prepared by a qualified hydrological consultant within 30-days of Planning Commission approval of this condition and install the monitoring system and implement monitoring within 30-days of Planning Department approval of the plan. The results of the monitoring shall be submitted to the Planning Department every 30-days and in the annual report.
8. Add a new condition III.B.7 requiring the operator to follow the recommendation of the memo dated August 25, 2005 from the County Geologist and the Planning Department Senior Civil Engineer and reconstruct the fill as engineered fill meeting all URS recommendations and Code requirements and submit the required technical report for the Pond 106 embankments.
9. Add a new condition II.T requiring the operator shall immediately notify the Planning Director of any change in any significant environmental condition or mining operation which has not been anticipated in the Mining Approval, Certificate of Compliance, or Reclamation Plan Approval.

Conditions of Approval

Certificate of Compliance and Reclamation Plan Approval, #92-0331 & Minor Mining Approval Amendment 98-0809

I. EXHIBITS

All mining operations shall conform to the following exhibits, which are incorporated as conditions of this Certificate of Compliance, except as modified by specific conditions set forth below. The following Exhibits are on file with the Planning Department:

- A. Mitigation Monitoring Program, dated October 1996, prepared by the Santa Cruz Planning Department.
- B. Amended Mining and Reclamation Plans, dated June 2005, by Robert L. DeWitt and Associates, consisting of 14 sheets.
- C. Wilder Sand Plant Amended Revegetation Plan, dated February 2005, by Greening Associates.

II. GENERAL PROVISIONS

- A. All provisions of Use Permit 2791-U shall remain in effect. This Certificate of Compliance shall augment, and supersede where in conflict with, the provisions of Use Permit NO. 2791-U.
- B. This Approval is limited to portion of the following County assessor parcel numbers: 059-141-04, -05, -09, 059-041-30, -26, -27, and -31. For specific areas of mining and reclamation within the boundaries of these parcel numbers please refer to above listed Exhibits. Prior to resumption of mining, applicant shall provide lease agreement with California Department of Parks and Recreation for parcels 059-041-26, -27, and -31, to be kept on file at the Planning Department.
- C. This Certificate of Compliance is for the extraction, processing, storage, shipping of sand resources obtained from the quarry site in accordance with the conditions of Use Permit 2791-U and the conditions herein and for reclamation of existing, proposed, and previously mined lands as shown in the approved Revegetation Plan as revised, and in accordance with the conditions of an approved Habitat Conservation Plan/Section 10a Permit prepared for the protection of the California Red-legged frog (Jones and Stokes Associates, 1996), adopted herein by reference. Upon approval of said Habitat Conservation Plan/Section 10a Permit, or any amendment thereof, the Applicant shall amend the above stated Reclamation Plan as needed to incorporate the requirements of U.S. Fish and Wildlife Service approved Habitat Conservation Plan/Section 10a permit.

- D. Prior to approval by U.S. Fish and Wildlife Service of said Habitat Conservation Plan/Section 10a Permit, any activity on the above referenced Assessor Parcel Numbers, shall be in conformance with the Endangered Species Act of 1973, as amended. Applicant shall notify the U.S. Fish and Wildlife Service and the Planning Director and receive approval in writing, prior to commencing work. All biotic monitoring reports submitted to U.S. Fish and Wildlife shall concurrently be submitted to the Planning Director.
- E. Minor variations to this Approval meeting the standards of County Code Section 18.10.134 and requested by the mining operator or staff which do not change the general concept of use and operation, and which do not adversely affect the environment, may be approved in writing by the Planning Director following review and recommendation by the County's Environmental Coordinator, pursuant to the requirements of Section 16.54.032, which states that: "A Minor variation to any condition required by this Chapter may be made by the Planning Director pursuant to the authority contained in Section 18.10.134, and shall be forwarded as a written correspondence item on the next Planning Commission Agenda. In reviewing the minor variation the Planning Commission may require the minor variation to be processed as a Minor or Major amendment or any add, delete, or revise any condition of the minor variation."
- F. If, at any time, the Planning Director determines that there is a substantial noncompliance with any of these conditions, and/or Exhibits, the Planning Director shall forward a recommendation to the Planning Commission to set a hearing to consider revocation of the Certificate of Compliance in accordance with the provisions of County Code Section 18.10.136. Section 16.54.090 through 16.54.098.
- G. Within 90 days of project approval, each Property owner of the mining site, the applicant and the operator shall execute, date and return to the Planning Director two copies of a Declaration of Restrictions binding each to comply with each and every term and condition of the Certificate of Compliance and Amendment pursuant to the requirements of Section 16.54.050. Failure to sign the approval or record the Declaration as described above shall render this Certificate of Compliance null and void and all mining operations shall cease at the Quarry site except reclamation and revegetation work in accordance with the above listed Exhibits and requirements. Prior to signing and recording the document, all Exhibits for the Mining Plan shall be "wet stamped" and signed by a Registered Civil Engineer.
- H. Mitigation measures included in approvals from the Department of Fish and Game, U.S. Fish and Wildlife and/or agreements from the Regional Water Quality Control Board are incorporated by reference as conditions of this Certificate of Compliance. All mining and reclamation activities shall conform with

the Conditions of Approval and with the regulations of the following agencies as they apply to the mining operations.

1. Central Coast Regional Water Quality Control Board
2. Monterey Bay Unified Air Pollution Control District
3. California Department of Fish and Game
4. State Coastal Commission
5. U.S. Fish and Wildlife Service

The mining operator shall provide the County with copies of any permits, orders, or agreements issued by these agencies and any permit amendments, within 30 days of receipt.

- I. This Certificate of Compliance shall be reviewed by the Planning Commission within five years from the date of issuance. In connection with such review, the Planning Commission shall take public testimony and shall otherwise investigate the permittee's compliance with the conditions of this Certificate of Compliance, and shall be empowered to amend the conditions of the COC if necessary to eliminate nuisance conditions or to mitigate problems resulting from a change of circumstances pursuant to Section 16.54.031(b).
- J. In conjunction with the annual report to the State Geologist required by SMARA, an annual report to the Planning Director shall be prepared by a professional determined by the Planning Director as qualified to prepare such report. The report shall be submitted by the mining operator to the Planning Director by April 1 of each year. If the Planning Director determines the need for an independent consultant with specialized expertise, the mining operator shall obtain such consultant. All costs of such report and its review shall be paid by the mining operator. The report shall include the requirements of Section 16.54.073 of the County Code and monitoring logs for all wells, piezometers, and springs (if any) for the entire year, and analysis thereof, as described in Conditions III.C.7 through III.C.10.
- K. All costs for the County's inspections and review of Annual Reports and other reports submitted by the Quarry shall be paid by the Quarry within 30 days after billing.
- L. All mining operations shall be in compliance with the State's Surface Mining and Reclamation Act (SMARA) and Chapter 16.54 of the County Code.
- M. In the event that future County inspections of the subject property disclose non-compliance with any Conditions of this Approval or any violation of the County Code, the operator shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement

actions, up to and including Certificate of Compliance revocation pursuant to Sections 16.54.090 through 16.54.098 of the County Code.

- N. Within 30 days of approval of the Habitat Conservation Plan/Section 10a permit from the U.S. Fish and Wildlife Service, the Quarry shall submit a revised financial assurance in conformance with the requirements of Sections 16.54.060 and 061.
- O. AMENDING CONDITION 4, USE PERMIT 2791-U: Coincident with the initial installation of the processing plant, applicant shall construct, maintain and operate rail loading facilities capable of handling ten carloads of materials per day. Transport of materials from quarry site to rail loading facilities shall be by covered conveyor system developed under State Highway 1, in accordance with requirements of the State Division of Highways.

Maintenance and Operation of Rail Loading Facility: Condition #4 requires that Graniterock Company, throughout the life of its mining operations, maintain the integrity of the major components of its rail loading facilities: the tunnel under the State Highway and the rail siding tracks. However, Graniterock shall be allowed, during periods when the cost of shipping sand by rail is not competitive with the cost of shipping sand by truck, to reduce the level of maintenance on the minor components of its rail loading facilities: including but not limited to conveyor belts, rollers, chutes, and other material handling paraphernalia.

To determine periods when the cost of shipping sand by rail is not competitive with the cost of shipping sand by truck, Graniterock shall submit a Rail Haul Feasibility Study to the County. The scope and methodology of that Study beyond those listed below shall be established by agreement between Graniterock and the County. In determining rail haul costs, Graniterock's Rail Haul Feasibility Study shall not include any expenditures by the Graniterock to reinstall or upgrade the components of its rail loading facilities. The Rail Haul Feasibility Study shall be required to include:

1. A comparison of the cost of using Union Pacific Lines' (or other possible carriers') quoted price per ton for hauling sand from the Quarry to markets in downtown San Jose, which price shall be based on using both Union Pacific's (or other carrier's) rail cars as compared to using Graniterock's owned and maintained rail cars. Also included shall be the variable costs (labor) for both loading and unloading rail cars.
2. The feasibility of connecting cars to other trains utilizing the rail line adjacent to Wilder Quarry.

3. A comparison of the cost of rail haulina to the cost of truck hauling. The study shall use established truck haul rates for both bottom dump and transfer trucks.

Prior to the completion of CALTRANS planned improvements to the Mission Street corridor, an updated Rail Haul Feasibility Study may be required if the City of Santa Cruz Traffic Engineer determines that a reduction in intersection Level of Service (LOS) has occurred on Mission Street.

Additional Rail Haul Feasibility Studies shall be prepared at such times as the County believes economic conditions may have occurred – such as a sianificant change in either rail or truck haul rates. In no event, shall a Rail Haul Feasibility Study be required more frequently than annually or less frequently than every 5 years.

- P. AMENDING CONDITION 11, USE PERMIT 2791-U: At such time as the property owner or any other entitv (including a public agency) seeks to implement a specific post-reclamation use of the site, the owner shall obtain a development permit and coastal zone permit from the County of Santa Cruz. Such permits shall be obtained regardless of whether the Dost-reclamation use is carried out solely by a private entity or under the auspices of a public agency including, without limitation, the California Department of Parks and Recreation. The terms and conditions of such permits shall be fully enforceable by the County of Santa Cruz to the extent permitted by law. This condition shall run with the land and any sale or transfer of any interest in the property to any person or entitv (including without limitation, a public entity) shall be subject to the seller/transferor requiring the buyer/transferee to enter into a written agreement to comply with the terms of this condition.
- Q. If at any time, the applicant proposes to increase the production limit of 250,000 tons per year as described in Condition III.A.13 of this COC, the following condition shall apply: Prior to approval of any production increase, the applicant shall submit to the Planning Director engineered drawings for reconstruction of rail loading facilities, including an outline of work required to bring on line the major components such as the tunnel under Highway One and reconstruction of rail spur. The drawings shall also include conveyor belts, rollers, chutes and other material handling paraphernalia. The costs for reconstruction of these facilities shall be included in the Financial Assurances estimates submitted for State and Planning Commission approval. Percentage of product shipped by rail may be reviewed by the Planning Commission at that time.
- R. An amended HCP shall be submitted to the U. S. Fish and Wildlife Service no later than October 31, 2005.

- S. An application for a Major Mining Approval Amendment shall be submitted to the County Planning Department no later than October 31, 2005.
- T. The operator shall immediately notify the Planning Director of any change in any significant environmental condition or mining operation which has not been anticipated in the Mining Approval, Certificate of Compliance, or Reclamation Plan Approval.

III. PER REQUIREMENTS

A. Mining

1. The mining plan shall be revised to incorporate any changes unanticipated by the approval of the Habitat Conservation Plan/Section 10a approval, or any amendment thereof, by the U.S. Fish and Wildlife Service including a proposal for compliance with the conditions of approval as defined in the April 24, 1968 letter of approval for Dam site 2.
2. All mining activities, including clearing, excavation or other disturbances shall be done in conformance with the above Exhibits as revised. Setbacks shall be measured from the property boundary lines on a horizontal plane.
3. A benchmark shall be established in the Quarry floor during the first five-year interval of mining as described in the above Exhibits in a visible area not proposed for disturbance.
4. Prior to issuance of any building permit, new on-site structures shall incorporate appropriate Uniform Building Code requirements and shall be designed by a registered civil engineer.
5. A Geotechnical Evaluation of liquefaction potential for areas where new foundations are proposed shall be conducted prior to building within areas of known liquefaction potential. Plans shall be designed in conformance with recommendations that study and shall be reviewed for approval by the Planning Department. (MM G-2)
6. The Quarry work face shall be excavated in compliance with the benching standards set forth by Use Permit 2791-U, the Santa Cruz County Mining Ordinance, OSHA, MSHA, and in accordance with the above Exhibits.
7. A slope-specific geotechnical investigation shall be completed by a registered professional that demonstrates the stability of the oversteep northeastern quarry slope exceeds a factor of safety of 1.2 for the permanent slope. A permanent buffer setback of 100' shall be established through a Declaration

- of Restriction if a 1.2 factor of safety cannot be established for this slope (MM-G-4)
8. Prior to excavating, clearing, or otherwise disturbing the land within 200 feet of the mining lease boundary, the mining operator shall provide survey markers at 200-foot intervals to indicate the location of the maximum mining limit. The markers shall be maintained until a clear work face has been established and in compliance with Condition III.A.12 below.
 9. Silt fences shall be installed and hydro mulching required up-slope of riparian areas and shall be implemented prior to and during all mining activities within the active mining area pursuant to the requirements of Mitigation Measure G-5a of the EIR prepared for this project. (MM G-5a)
 10. Prior to mining, the approved mining area shall be surveyed and staked in the field. Protective fencing shall be installed as required by the Planning Director, and in compliance with the requirements of the HCPI Section 10a permit, to prevent any additional disturbance to the adjacent riparian areas.
 11. The rate of mining and trucking shall not exceed 250,000 tons per year, except as provided in Condition II.Q. above.

B. Surface Drainage

1. Drainage improvements shall be designed by a qualified professional, and provide for the effective dispersal of runoff. Within 120 days of approval of the HCPI Section 10a permit, or financial assurance approval by the Planning Commission and prior to any disturbance, whichever is sooner as provided in these Conditions of Approval, the Quarry shall provide downstream erosion control at all culverts that could experience flow velocities above 3.5 cfs, or reduce flow velocities to a rate below 3.5 cfs. New designs shall be submitted to County Planning staff for review and approval prior to implementation. Best Management Practices to control sediment in culvert construction areas, including installing culverts during the dry season (April 15-October 15) and revegetation of disturbed areas immediately after installation shall be included on the plans or as approved in the Habitat Conservation Plan Section 10a permit approved by U.S. Fish and Wildlife Service. (MM H-4 and H-6)
2. Prior to any disturbance the Final Drainage Plan shall be amended to conform to the requirements of the approved HCP/Section 10a permit as necessary. Plans and calculations shall be submitted to County Planning for review and approval. (MM V-2)
3. The ponds and basins shall be dredged as needed to maintain adequate storage capacity as shown on the drainage plan.

4. Prior to reuse of Settling Basin 3 for additional settling capacity, engineered plans for levee design and stability including potential for liquefaction shall be submitted to County Planning for review and approval.
5. Measures provided in the "Revised Drainage Study," Robert DeWitt and Associates, Revised May 1996, "Erosion Control Plan," Robert L. DeWitt and Associates, Inc., Revised 9/27/96, and the "Revegetation Plan, Wilder Sand Plant, Habitat Restoration Group, Revised April 22, 1996, shall be implemented, as amended per the requirements of the HCP/Section 10a permit approval. All erosion control work shall be completed before October 15 of each year. Quarry shall implement Best Management Practices to control erosion from unpaved surfaces. (MM H-6, H-1, H-3)
6. The operator shall install devices to continuously monitor water quality in Sandy Flat Gulch and Old Dairy Gulch immediately upstream and downstream of the mine. The operator shall submit a plan for the continuous monitoring prepared by a qualified hydrological consultant within 30-days of Planning Commission approval of this condition and install the monitoring system and implement monitoring within 30-days of Planning Department approval of the plan. The results of the monitoring shall be submitted to the Planning Department every 30-days and in the annual report.
7. The operator shall submit the required technical report for the Pond 106 embankments, as required in the memo dated August 25, 2005 from the County Geologist and the Planning Department Senior Civil Engineer and, depending upon the outcome of the analysis and the County's review of the analysis, make recommendations to stabilize the embankments, if necessary, to assure long term stability.

C. Groundwater Protection

1. Channels which are designed to concentrate and direct Quarry runoff into the sediment pond detention system shall be armored with erosion resistant materials (such as rip-rap) at points of potential gullyng. The areas to be protected shall be decided by the Quarry's consulting civil engineer and detailing included in the annual report to the County.
2. The surface area of the Quarry which is stripped, mined or otherwise disturbed at any given time shall be minimized to the greatest extent compatible with reasonable mining and marketing requirements.
3. Reclamation and revegetation of each Quarry bench shall be done as soon as possible, upon completion of mining operations on that bench, in accordance with the revegetation plan.

4. Quarry storm water runoff control facilities into natural channels shall be in compliance with the approved Storm Water Prevention Plan and/or limits as set forth in the Regional Water Quality Control Board NPDES (discharge) Order. An updated copy of the NPDES Order, and/or Stormwater Prevention Plan shall be on file at County Planning prior to commencement of mining activities. All water quality monitoring and reporting requirements specified in the RWQCB Orders shall be complied with, and are included as conditions of this permit by reference.
5. The 1996 Drainage Plan by Robert L. DeWitt Engineering and the Erosion Control Plan (as amended) shall be implemented to offset potential erosion and sedimentation. The erosion control measures are to remain in effect from October 15 through April 15 of each year.
6. Prior to resumption of mining, a plan implementing Best Management Practices to control Fuel, Oil and Solvents on the property, and a Spill Prevention Plan, in compliance with County and State regulations, including double containment at all fuel storage and handling areas, shall be submitted to County Planning and County Environmental Health Services for review and approval. All approved measures of the Spill Prevention Plan shall be implemented prior to commencement of mining activities. (MM H-7)
7. Future pumping rates for Wilder Well #1 shall be limited to 175 gpm. Monthly monitoring of pumping rates shall be included in the required annual report. (MM H-8a)
8. Prior to resumption of mining, a Constant-Discharge pumping test of 72 hours minimum duration to determine transmissivity of the aquifer and how it responds to pumping conditions shall be performed by a professional qualified to perform such tests. The test shall be followed by a recovery test and the monitoring of at least 3 nearby wells to determine area groundwater impacts. The test results shall be submitted to the County Planning hydrologist. Test results may require modification of pumping at Well #1 to ensure production of this well will not contribute to groundwater overdraft in the area. (MM H-8b)
9. A baseline Groundwater Monitoring Program including groundwater levels and quality shall be implemented. The first round of monitoring shall be completed prior to resumption of mining. This program must include a continuous 7-day groundwater level monitoring period in Wilder Wells #1 and 21E01. The results of this continuous daily monitoring shall be submitted to the County Planning hydrologist to verify the potential for seawater intrusion. If this constant monitoring shows tidal influence on groundwater, the applicant shall remedy the problem by submitting a hydrologic report with a list of

recommendations including a proposal for barrier extraction wells installed seaward of Wilder Well #1, which address the seawater intrusion issue for review and approval by County Planning. Aquifer storage and retrieval concepts should be evaluated including storage of surface water in the underground aquifer using percolating ponds or injection wells, and a retrieval system. Groundwater monitoring shall also include installation of a new monitoring well located on the first emergent terrace near the shoreline. This well shall be screened within the Santa Margarita Sandstone formation at shallow and deep intervals. (MM H-9 and H-11b)

10. Prior to resumption of mining, a dedicated Piezometer shall be installed in the vicinity of detention pond #3. The piezometer shall be installed by a California licensed C-57 drilling contractor in accordance with California Department of Water Resources specifications. It shall be designed to screen any potential perched groundwater within the 50-70 foot elevation range. The bottom of the unconfined water table surface shall be within the 25-40 foot elevation range. The bottom of the piezometer shall be no less than 50 feet below sea level. Periodic measurements shall be taken on a quarterly basis for the first 5 years of mining to document the absence of a water table shallower than 20 feet below the maximum quarry depth of the 55-foot elevation. The quarry shall notify County Planning if piezometer measurements of water table levels show 20 feet separation between mining and the groundwater table. Monthly piezometer level readings shall be incorporated into the required annual report. Piezometer measurements of water tables shallower than 20 feet below the maximum mining floor depth shall necessitate one or both of the following actions, as determined by the County Planning Director exercising reasonable discretion:

- (a) Cessation of mining within the 5 year quarry area and increase the maximum allowed depth within the 10-year and 15-year areas to compensate for the loss of production in the 5-year area; or
- (b) Implementation of a groundwater protection plane in the 5-year quarry area using a barrier created by extraction wells down gradient of detention pond #3. (MM H-10)

D. Reclamation/Revegetation

1. The Quarry reclamation plans shall conform to the Santa Cruz County Mining Ordinance Reclamation Standards (County Code Sections 16.54.050 and .055, SMARA, and the Exhibits of this permit.
2. Reclamation activities requiring major earth moving activities shall be conducted during the dry season (April 15 – October 15) to prevent potential increase in sediment loading to watercourses. (H-12 and V-12)

3. Riparian habitat impacts shall be minimized by implementation of the following requirements:
 - (a) All road construction and mining activities shall be kept a minimum of 50 feet away from the outward edge of riparian vegetation along Old Dairy and Sandy Flat Gulches. **(MM V-1 a)**
 - (b) Areas disturbed by new culvert installation shall be revegetated immediately with willow cuttings according to the success criteria and remedial measures in the Revegetation Plan, approved for this project. **(MM V-1b)**
4. Ponds used as settlement basins shall be maintained after mining to provide habitat for the red-legged frog consistent with the requirements of the Habitat Conservation Plan/Section 10a permit approval, or any amendments thereof by U.S. Fish and Wildlife Service. **(MM V-17)**
5. The Reclamation Plan shall be revised to address habitat requirements for the red-legged frogs. **(MM V-18)**
6. To ensure that non-native fish or bullfrogs are not inadvertently introduced into the quarry drainage system, bullfrogs and predatory fish shall be controlled annually by measures consistent with the Habitat Conservation Plan/Section 10a permit approval, or any amendments thereof, by U.S. Fish and Wildlife Service. **(MM V-19)**
7. Graniterock shall implement a worker education program for quarry personnel and other persons who may be working in or near red-legged frog habitats. All workers who could come into contact with red-legged frogs shall be required to attend at least one instructional meeting. **(MM V-20)**
8. A qualified biologist shall conduct pre-construction surveys in pond or creek sites scheduled for vegetation or sediment removal. If red-legged frogs are present and would not restrict mining operations, disturbance shall be restricted to between September 15 to January 15 (non-breeding season) as approved by the U.S. Fish and Wildlife Service. Frog relocation activities shall occur only as approved by the U.S. Fish and Wildlife Service through the approved Habitat Conservation Plan/Section 10a permit, or any amendment thereof. Surveys shall be included in the Quarry's annual report to the County. **(MM V-21)**
9. Excess sediment and vegetation required for removal shall be conducted in a manner consistent with the approved Habitat Conservation Plan/Section 10a permit. Removed sediment shall be disposed of in a manner that does not result in erosion, and revegetated pursuant to the requirements of the

Revegetation Plan. To reduce **loss** of red-legged frog habitat, the number of points of access for sediment excavation/removal and the area of disturbance shall be minimized. (MMV-22)

10. The use of chemical weed control in aquatic habitats, including riparian streamside vegetation is prohibited. (MM V-23)

E. Traffic/Circulation

1. The quarry shall maintain an active information program for the shippers and drivers regarding speed limits, and maintaining truck routing through the City of Santa Cruz.

F. Air Quality

1. Unpaved Quarry roads shall be watered or sprayed with lignin sulfonate or other environmentally approved dust retardant to reduce fugitive dust. (MM H-5, G-6 and G-5b)
2. All equipment and processing facilities shall be maintained in accordance with APCD standards for stationary sources.
3. Revegetation in accordance with the approved Reclamation and Vegetation Plan shall be initiated as soon as practical in order to minimize fugitive dust.
4. The quarry shall install and use water sprays during all dry screening operations and at all dry material transfer points. (MM AQ-5a and 5b)
5. Prior to reactivation of mining activities, the Quarry access road shall be paved to a width necessary to ensure that all sand trucks remain on a paved surface from the time they leave the truck scale area until they enter Highway One.

G. Aesthetics

1. The Quarry shall permanently retain the existing grove of Eucalyptus, Monterey Cypress and Monterey pine trees to screen views of mining activities from Highway One. If any part of the grove is removed (i.e. fire, disease) a new screening shall be implemented immediately using a combination of earth berms, fencing and planting that is designed to be harmonious with the aesthetics of Wilder Ranch State Park and the surrounding area. (MM A-I)
2. Aesthetic buffers of native vegetation shall be planted to screen views of site facilities including fencing of mining areas. The Quarry shall use appropriate

colors for equipment and facilities (i.e., non-reflective and non-bright colors and materials). (MM A-2)

H. Protection of Paleontological Resources

1. In the event that potentially significant paleontological resources (i.e. significant skeletal remains that might substantially contribute to knowledge of prehistory) are found during mining operations, all work shall be halted within **200** feet of the find and the Planning Director shall be notified immediately. A qualified paleontologist, as approved by the Planning Director, shall be retained to assess the significance of the find and implement mitigations measures recommended as a result of such assessment, consistent with the County's Paleontological Resource Protection ordinance.

I. Operating and Shipping Hours

1. Hours of Quarry operation shall be 5:00 a.m. to 3:30 p.m., Monday through Friday.
2. Shipping operations shall be confined to between the hours of 5:00 a.m. to 7:00 a.m., with reduced shipping at the rate of two trucks per hour allowed during 7:00 a.m. to 9:00 a.m., resuming normal shipping at 9:00 a.m. to 3:00 p.m. for shipments through the Mission Street corridor Monday through Friday. Shipments northward may occur during 5:00 a.m. to 3:30 p.m. Monday through Friday.
3. Maintenance operations shall be conducted from 5:00 a.m. to 8:00 p.m. Monday through Friday and Saturday between 7:00 a.m. and 3:00 p.m.

J. Fence/Public Safety

1. The entire mining site shall be fenced for safety and maintained by the owner or operator, to protect public safety in conformance with County Code Section 16.54.050(c)11. Gaps in the fencing may be approved based on field conditions (topography and vegetation) and approved by Planning Department staff.
2. The Quarry shall implement and maintain a Fire Protection and Evacuation Plan for persons employed in the mining operation. The plan shall implement Best Management Practices for reducing fire hazards from mining activities. (MM F-3, F-5b and 5c)

K. Posting of Signs

1. Within 90 days after this Certificate of Compliance has been granted and continuously thereafter, the outer boundaries of the mining lease area shall be continuously posted with signs in such a manner as will reasonably give notice to the public of matters contained in such notice, stating in letters not less than four inches in height: "MINING APPROVALS and stating in letters not less than one inch in height: "THIS PROPERTY MAY BE USED AT ANY TIME FOR THE MINING AND PROCESSING OF ROCK, SAND, GRAVEL OR MINERALS." Said signs shall be maintained in legible condition at all times.

IV. MITIGATION MONITORING PROGRAM

The mitigation measures contained in Exhibit " A of this permit have been incorporated into the conditions of approval for this project in order to mitigate or avoid significant effects on the environment. Exhibit " A of this permit specifies which mitigation measures are the responsibility of the applicant. As required by Section 21081.6 of the California Public Resources Code, the monitoring and reporting program contained in Exhibit " A is hereby adopted as a Condition of Approval for this project. The purpose of this monitoring is to ensure compliance with the environmental mitigations during project implementation and operation. Failure to comply the conditions of approval, including the terms of the adopted monitoring program, may result in permit revocation pursuant to Section 18.10.462 and 16.54.090 through .098 of the County Code.

Permit Review

Certificate of Compliance, #92-0331

I. EXHIBITS

All mining operations shall conform to the following exhibits, which are incorporated as conditions of this Certificate of Compliance, except as modified by specific conditions set forth below. The following Exhibits are on file with the Planning Department:

A. Mitigation Monitoring Program, dated October 1996, prepared by the Santa Cruz Planning Department.

Review Comment: Wilder Quarry has not been in compliance with a number of mitigation measures in the Mitigation Monitoring Program during the first five-year period of operation. These are listed below

- H-5. It appears based on water quality monitoring data that increased sediment loading of watercourses has occurred as a result of mining activities. Data submitted in annual reports to the RWQCB indicates cause for concern regarding quality of storm water leaving the site. Subsequently (2004), Graniterock has taken steps to improve the quality of storm water that leaves the site, including replacement of ageing silt fences, expanding vegetative filters and establishment and maintenance of an additional sediment basin. These measures have resulted in a decrease in storm water discharge and significant improvement in quality of storm water discharge. More recent storm water quality sampling data confirm this. Currently, the mine is in compliance with this mitigation measure.
- V-9. **As** a result of the encroachments noted in V-16 below increases in sedimentation in Old Dairy gulch may have occurred. These impacts can be avoided in the future by complying with relevant permit conditions and mitigation measures, and best management practices. Currently, the mine is in compliance with this mitigation measure. See H-5.
- V-16. Mining activities have encroached into the protected riparian area along Old dairy gulch (50 feet from the outward edge of riparian vegetation). The encroachment ceased in 2002. Currently, the mine is in compliance with this mitigation measure.
- V-18. The reclamation plan has not been revised to incorporate red-legged frog habitat and all ponds have not been maintained for red-legged frog habitat.

- V-21. Pre-construction surveys were not conducted for red-legged frogs prior to the disturbance of riparian corridors noted in V-16 above. Otherwise, pre-construction surveys are completed as required.
- V-22. Sediment and vegetation management in operational ponds is not performed in conformance with this mitigation measure.

The HCP required maintenance of red-legged frog habitat in operational ponds, including specific vegetation and sediment management measures, which is not occurring. This will be addressed in the amended HCP and Major Mining Approval Amendment.

- B. Sand Plant Access Road, Robert L. DeWitt and Associates, Inc., Revised 9/26/96 (three sheets).**
- C. Five Year Interval Mining Plan, Robert L. DeWitt and Associates, Inc. Revised 9/27/96, Sheet 1 of 4.**
- D. Ten Year Interval Mining Plan, Robert L. DeWitt and Associates, Inc., Revised 9/27/96, Sheet 2 of 4.**
- E. Fifteen Year Interval Mining Plan, Robert L. DeWitt and Associates, Inc., Revised 9/27/96, Sheet 3 of 4.**
- F. Cross Sections and Five Year Interval Profile, Robert L. DeWitt and Associates, Inc., Revised 9/27/96, Sheet 4 of 4.**

Review Comment: Mining has not been consistent with the above four exhibits (C, D, E & F). Within the first five years of operations, mining has occurred within 90% of the approved mining area, including areas designated as five, ten, and fifteen year phases. The mining envisioned in the EIR, and per the above four exhibits, was to occur in three phases from southeast to northwest, utilizing a bulldozer and loader. Instead, mining has occurred on nearly the entire site, occurring top to bottom, utilizing belly-loading scrapers. Planning staff informed Graniterock to discontinue mining outside of the approved five-year area in mid March 2002. Graniterock has complied. Revegetation and erosion control measures have been applied to the disturbed portions of the 10 and 15-year areas. Currently, mine phasing and concurrent reclamation are advancing as outlined in the above four exhibits. In-pit water storage and backfilling of previously mined areas are changes that are discussed in the staff report. The changes are shown in the amended plans.

- G. Operational Mining Plan, Robert L. DeWitt and Associates, Inc., Revised 9/27/96, Sheet 1 of 1.**

Review Comment: The staff report explains how operations have been conducted at Wilder Quarry, which have not been consistent with the operational mining plan. The

staff report further discusses how these inconsistencies are addressed in the amended plan.

H. Final Grading and Drainage Plan, Robert L. DeWitt and Associates, Inc., Revised 9/27/96, Sheet 1 of 1.

Review Comment: As discussed in the staff report, changes in the operational mining plan result in changes to the final grading and drainage plan. The changes are shown in the amended final grading and drainage plans.

I. Erosion Control Plan, Robert L. DeWitt and Associates, Inc., Revised 9/27/96, Sheet 1 of 1.

Review Comment: Accelerated erosion has occurred, or is likely to have occurred in the past See H-5, V-9 and V-16 above. However, more recently Graniterock has conducted necessary maintenance and implemented additional erosion control measures. The amended plans contain an updated erosion control plan.

J. Wilder Sand Plant Revegetation Plan, Habitat Restoration Group, Revised April 1996 (50 pages, Appendix, and Sheet 1: "Existing Vegetation (August, 1992)," Sheet 2: "Plant Associations to be Created (April, 1996, to be amended per requirements of approved Habitat Conservation Plan) Section 10a permit through the U.S. Fish and Wildlife Service).

Review Comment: Revegetation has been implemented in the following areas: Habitat compensation area; landscape screening area; revegetation and erosion control at culvert construction sites; and removal of invasive non-native plants. In addition, Graniterock, in conjunction with the new revegetation consultant, has implemented revegetation on the finish floor and side slopes of the five-year mining area, including the establishment of test plots.

Other elements of the revegetation plan have not been implemented, including revegetation of operational ponds, and enhancement of grassland and coastal scrub plant communities in previously mined areas as envisioned in the plan. Revegetation has fallen short of the success criteria in the approved revegetation plan. However, a new revegetation consultant for Graniterock has concluded that an update of the success criteria is warranted and the revegetation plan should be revised. The consultant has prepared an amended revegetation plan, which recommends new success criteria that are consistent with naturally occurring habitats in the area surrounding the quarry and a planting plan that will create vegetative cover similar to naturally occurring habitats in the area surrounding the quarry. The amended plan is consistent with the requirements of SMARA and County Mining Regulations. The outstanding issue in the revegetation plan is the performance standards for red-legged frog habitat in the ponds. Ponds located outside the mining area have been revegetated and are functioning as red-legged frog habitat. As a result of confusion regarding the performance standards in the HCP the amended plan defers to the wildlife

biologist monitoring red-legged frogs to assess any future need for vegetative changes to these ponds. The wildlife biologist does not recommend any vegetative changes at this time. At the completion of mining, the ponds located inside the mining area will become available for revegetation. Until an HCP amendment is approved by the USFWS it is not known exactly what changes, if any, may be needed to the amended revegetation plan and performance standards.

II. GENERAL PROVISIONS

- A. All provisions of Use Permit **2791-U** shall remain in effect. This Certificate of Compliance shall augment, and supersede where in conflict with, the provisions of Use Permit NO. **2791-U**.

Review Comment: See separate review of Use Permit 2791-U.

- B. This Approval is limited to portion of the following County assessor parcel numbers: **059-141-04**, -05, **-09,059-041-30**, **-26**, **-27**, and **-31**. For specific areas of mining and reclamation within the boundaries of these parcel numbers please refer to above listed Exhibits. Prior to resumption of mining, applicant shall provide lease agreement with California Department of Parks and Recreation for parcels **059-041-26**, **-27**, and **-31**, to be kept on file at the Planning Department.

Review Comment: All mining and reclamation occurs within the approved boundaries. Lease agreements between Graniterock and the previous owners of all of the properties listed above were submitted with the 1998 annual report. Subsequent to those lease agreements Graniterock became the owner of the first four parcels referenced above, which encompasses the mine. California State Parks became the owner of the later three parcels reference above, one of which encompassed the water storage reservoir discussed in the staff report. In addition, the lease agreements cover the current water supply well for the quarry (Wilder Well #1), which is located on State Parks property. The lease agreements expire August 1, 2006. Therefore, unless there is a new lease agreement between Graniterock and State Parks, it appears that Graniterock's ability to use Wilder Well #1 will cease after August 1, 2006.

- C. This Certificate of Compliance is for the extraction, processing, storage, shipping of sand resources obtained from the quarry site in accordance with the conditions of Use Permit **2791-U** and the conditions herein and for reclamation of existing, proposed, and previously mined lands as shown in the approved Revegetation Plan as revised, and in accordance with the conditions of an approved Habitat Conservation Plan/Section 10a Permit prepared for the protection of the California Red-leggedfrog (Jones and Stokes Associates, **1996**), adopted herein by reference. Upon approval of said Habitat Conservation Plan/Section 10a Permit, the Applicant shall amend the above stated Reclamation Plan as needed to incorporate the

requirements of U.S. Fish and Wildlife Service approved Habitat Conservation Plan/Section 10a permit.

Review Comment: As explained in the staff report mining operations and reclamation activities have not proceeded in accordance with the project description and permit conditions. The project is not in conformance with the revegetation plan or the HCP. The Reclamation Plan has never been formally amended to incorporate all of the requirements of the HCP.

All of these issues can be resolved through approval of an amendment to the HCP by the USFWS and approval of amendments to the COC and Reclamation Plan by the County. Graniterock has submitted amended plans and Staff is recommending approval of a Minor Mining Approval Amendment and establishment of a timeline for submittal of a draft HCP amendment to the USFWS. A Major Mining Approval Amendment is required for the changes that will be addressed by the amended HCP.

- D. Prior to approval by U.S. Fish and Wildlife Service of said Habitat Conservation Plan/Section 10a Permit, any activity on the above referenced Assessor Parcel Numbers, shall be in conformance with the Endangered Species Act of 1973, as amended. Applicant shall notify the U.S. Fish and Wildlife Service and the Planning Director and receive approval in writing, prior to commencing work. All biotic monitoring reports submitted to U.S. Fish and Wildlife shall concurrently be submitted to the Planning Director.

Review Comment: In compliance.

- E. Minor variations to this Approval meeting the standards of County Code Section 18.10.134 and requested by the mining operator or staff which do not change the general concept of use and operation, and which do not adversely affect the environment, may be approved in writing by the Planning Director following review and recommendation by the County's Environmental Coordinator, pursuant to the requirements of Section 16.54.032, which states that: "A Minor variation to any condition required by this Chapter may be made by the Planning Director pursuant to the authority contained in Section 18.10.134, and shall be forwarded as a written correspondence item on the next Planning Commission Agenda. In reviewing the minor variation the Planning Commission may require the minor variation to be processed as a Minor or Major amendment or any add, delete, or revise any condition of the minor variation."

Review Comment: Two minor variations have been approved regarding drainage and hours of operation. However, the issues of non-compliance identified in this staff report go well beyond a minor variation and must be resolved through the permit amendment process.

- F. If, at any time, the Planning Director determines that there is a substantial noncompliance with any of these conditions, and/or Exhibits, the Planning Director shall forward a recommendation to the Planning Commission to set a hearing to consider revocation of the Certificate of Compliance in accordance with the provisions of County Code Section **18.10.136**, Section **16.54.090** through **16.54.098**.

Review Comment: This is a report to the Planning Commission of substantial non-compliance with permit conditions and exhibits. This staff report provides recommendations to ensure that the non-compliance issues are resolved in a timely manner. At this time, the staff recommendation does not include a recommendation to set a hearing to consider revocation of the COC. However, the Planning Commission may direct staff to set such a hearing.

- G. Within **90** days of project approval, each Property owner of the mining site, the applicant and the operator shall execute, date and return to the Planning Director two copies of a Declaration of Restrictions binding each to comply with each and every term and condition of the Certificate of Compliance and Amendment pursuant to the requirements of Section **16.54.050**. Failure to sign the approval or record the Declaration as described above shall render this Certificate of Compliance null and void and all mining operations shall cease at the Quarry site except reclamation and revegetation work in accordance with the above listed Exhibits and requirements. Prior to signing and recording the document, all Exhibits for the Mining Plan shall be "wet stamped" and signed by a Registered Civil Engineer.

Review Comment: In Compliance

- H. Mitigation measures included in approvals from the Department of Fish and Game, U.S. Fish and Wildlife and/or agreements from the Regional Water Quality Control Board are incorporated by reference as conditions of this Certificate of Compliance. All mining and reclamation activities shall conform with the Conditions of Approval and with the regulations of the following agencies as they apply to the mining operations.

1. Central Coast Regional Water Quality Control Board
2. Monterey Bay Unified Air Pollution Control District
3. California Department of Fish and Game
4. State Coastal Commission
5. **U.S.** Fish and Wildlife Service

The mining operator shall provide the County with copies of any permits, orders, or agreements issued by these agencies and any permit amendments, within **30** days of receipt.

Review Comment: This mine operates under a General Industrial Activities Storm Water Permit issued by the Central Coast Regional Water Quality Control Board (RWQCB). In compliance with their storm water permit Graniterock submits annual reports to the RWQCB and includes copies of these reports in their annual reports to the County. A Permit to Operate from the Monterey Bay Unified Air Pollution Control District covers the sand processing facility. All culvert improvement and bridge construction projects were completed in 1998 pursuant to a Stream Alteration Agreement with the California Department of Fish & Game. The 1996 approval of the COC and Reclamation Plan includes a Coastal Permit for the Reclamation Plan.

As discussed in the staff report there are a number of issues at Wilder Quarry, which are not consistent with the HCP approved by the U.S. Fish and Wildlife Service.

- I. This Certificate of Compliance shall be reviewed by the Planning Commission within five years from the date of issuance. In connection with such review, the Planning Commission shall take public testimony and shall otherwise investigate the permittee's compliance with the conditions of this Certificate of Compliance, and shall be empowered to amend the conditions of the COC if necessary to eliminate nuisance conditions or to mitigate problems resulting from a change of circumstances pursuant to Section 16.54.031(b).

Review Comment: The item before your Commission is the required Five Year Review.

- J. In conjunction with the annual report to the State Geologist required by SMARA, an annual report to the Planning Director shall be prepared by a professional determined by the Planning Director as qualified to prepare such report. The report shall be submitted by the mining operator to the Planning Director by April 1 of each year. If the Planning Director determines the need for an independent consultant with specialized expertise, the mining operator shall obtain such consultant. All costs of such report and its review shall be paid by the mining operator. The report shall include the requirements of Section 16.54.073 of the County Code and monitoring logs for all wells, piezometers, and springs (if any) for the entire year, and analysis thereof, as described in Conditions III.C.7 through III.C.10.

Review Comment: Annual Reports have been submitted as required

- K. All costs for the County's inspections and review of Annual Reports and other reports submitted by the Quarry shall be paid by the Quarry within 30 days after billing.

Review Comment: There have been no problems with billing or payments for staff time.

- L. All mining operations shall be in compliance with the State's Surface Mining and Reclamation Act (SMARA) and Chapter 16.54 of the County Code.

Review Comment: As discussed in the staff report, mining operations at Wilder Quarry over the last seven years have not been in compliance with a number of provisions of SMARA and County Code. The purpose of this staff report and the amendment process is to identify and summarize the non-compliance and recommend to your Commission an appropriate procedure to resolve the non-compliance in a timely manner.

- M. In the event that future County inspections of the subject property disclose non-compliance with any Conditions of this Approval or any violation of the County Code, the operator shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including Certificate of Compliance revocation pursuant to Sections 16.54.090 through 16.54.098 of the County Code.

Review Comment: In compliance

- N. Within 30 days of approval of the Habitat Conservation Plan/Section 10a permit from the U.S. Fish and Wildlife Service, the Quarry shall submit a revised financial assurance in conformance with the requirements of Sections 16.54.060 and 061.

Review Comment: In compliance; The County holds a Financial Assurance for this mine in the amount of \$2,348,700.

- O. AMENDING CONDITION 4, USE PERMIT 2791-U: Coincident with the initial installation of the processing plant, applicant shall construct, maintain and operate rail loading facilities capable of handling ten carloads of materials per day. Transport of materials from quarry site to rail loading facilities shall be by covered conveyor system developed under State Highway 1, in accordance with requirements of the State Division of Highways.

Maintenance and Operation of Rail Loading Facility: Condition #4 requires that Graniterock Company, throughout the life of its mining operations, maintain the integrity of the major components of its rail loading facilities: the tunnel under the State Highway and the rail siding tracks. However, Graniterock shall be allowed, during periods when the cost of shipping sand by rail is not competitive with the cost of shipping sand by truck, to reduce the level of maintenance on the minor components of its rail loading facilities: including but not limited to conveyor belts, rollers, chutes, and other material handling paraphernalia.

To determine periods when the cost of **shipping** sand **by** rail is not competitive with the cost of **shipping** sand by truck, Graniterock shall submit a Rail Haul Feasibility Study to the County. The scope and methodology of that Study beyond those listed below shall be established by agreement between Graniterock and the County. In determining rail haul costs, Graniterock's Rail Haul Feasibility Study shall not include any expenditures by the Graniterock to reinstall or **upgrade** the components of its rail loading facilities. The Rail Haul Feasibility Study shall be required to include:

1. A comparison of the cost of using Union Pacific Lines' (or other possible carriers') quoted price per ton for hauling sand from the Quarry to markets in downtown San Jose, which price shall be based on using both Union Pacific's (or other carrier's) rail cars as compared to using Graniterock's owned and maintained rail cars. Also included shall be the variable costs (labor) for both loading and unloading rail cars.
2. The feasibility of connecting cars to other trains utilizing the rail line adjacent to Wilder Quarry.
3. A comparison of the cost of rail hauling to the cost of truck hauling. The study shall use established truck haul rates for both bottom dump and transfer trucks.

Prior to the completion of CALTRANS planned improvements to the Mission Street corridor, an updated Rail Haul Feasibility Study may be required if the City of Santa Cruz Traffic Engineer determines that a reduction in intersection Level of Service (LOS) has occurred on Mission Street.

Additional Rail Haul Feasibility Studies shall be prepared at such times as the County believes economic conditions may have occurred – such as a significant change in either rail or truck haul rates. In no event, shall a Rail Haul Feasibility Study be required more frequently than annually or less frequently than every 5 years.

Review Comment: Since approval of the COC in 1996, two rail haul feasibility studies have been completed. Both studies have concluded that the cost of shipping sand by rail is not competitive with the cost of shipping sand by truck. Graniterock has maintained the integrity of the major components of its rail loading facilities and reduced the level of maintenance on the minor components of its rail loading facilities.

- P. AMENDING CONDITION 11, USE PERMIT 2791-U: At such time as the property owner or any other entity (including a public agency) seeks to implement a specific post-reclamation use of the site, the owner shall obtain a development permit and coastal zone permit from the County of

Santa Cruz. Such permits shall be obtained regardless of whether the ~~post-~~reclamation use is carried out ~~solely by~~ a private entity or under the auspices of a public ~~agency~~ including, without limitation, the California Department of Parks and Recreation. The terms and conditions of such permits shall be ~~fully enforceable by~~ the County of Santa Cruz to the extent permitted by law. This condition shall run with the land and ~~any~~ sale or transfer of ~~any~~ interest in the ~~property~~ to ~~any person~~ or entity (including without limitation, a ~~public entity~~) shall be ~~subject to the seller/transferor requiring the buyer/~~transferee to enter into a written ~~agreement~~ to comply with the terms of this condition.

Review Comment: No specific post-reclamation use has been identified at this time.

- Q. If at any time, the applicant proposes to increase the production limit of 250,000 tons per year as described in Condition III.A.13 of this COC, the following condition shall apply: Prior to approval of any production increase, the applicant shall submit to the Planning Director engineered drawings for reconstruction of rail loading facilities, including an outline of work required to bring on line the major components such as the tunnel under Highway One and reconstruction of rail spur. The drawings shall also include conveyor belts, rollers, chutes and other material handling paraphernalia. The costs for reconstruction of these facilities shall be included in the Financial Assurances estimates submitted for State and Planning Commission approval. Percentage of product shipped by rail may be reviewed by the Planning Commission at that time.

Review Comment: Wilder Quarry exceeded the production limit in 2000 and 2001. In order to rectify the violation created by the increased mining for the year 2000 and 2001, the County required that mining be reduced in the year 2002 by the amount that was over the tonnage limit of 250,000 tons in the years 2000 and 2001. Graniterock accepted this requirement and reduced production at the facility. Even though production in 2002 was well below the 250,000 ton limit it still exceeded the agreed upon reduced production limit by approximately 6,000 tons. The production for 2003 was again well below the actual production limit of 250,000 tons. Therefore, at this time Graniterock has reduced production by an amount that accounts for the overproduction in 2000 and 2001.

III. OPERATING REQUIREMENTS

A. Mining

1. Prior to resumption of mining, the mining plan shall be revised to incorporate any changes theretofore unanticipated by the approval of the Habitat Conservation Plan/Section 10a approval by the U.S. Fish and Wildlife Service including a proposal for compliance with the conditions

of approval as defined in the April **24,1968** letter of approval for Dam site **2**.

Review Comment: In anticipation of the changes to be required by the HCP, in April 1998 Graniterock revised the mining plan to incorporate changes to the configuration of two storm-water settling ponds and the overall water circulation system. The revised plans were approved under a Minor Variation. However, the 1996 COC and Reclamation Plan have never been formally amended to incorporate all of the requirements of the HCP into operation of the mine. As required, Graniterock submitted an application for an amendment to the 1996 COC in September 1998. A number of proposals to revise the Reclamation Plan, including the mining plan and revegetation plan have been submitted as part of the application, but none have satisfactorily incorporated all of the requirements of the EIR and HCP. In addition to a determination that the application was incomplete the County required Graniterock to conduct further groundwater studies before proceeding with the amendment application. The groundwater studies, discussed above, have proceeded while the amendment application has remained incomplete. In addition to an incomplete application and ongoing groundwater studies, changes to the project during mining operations have changed the nature and scope of the amendments needed.

Under the circumstances and with the assistance of the USFWS, County staff has worked with Graniterock to resolve the issues of noncompliance. The appropriate course of action requires approval of an amendment to the HCP by the USFWS and approval of amendments to the COC and Reclamation Plan by the County. Graniterock has submitted amended plans and Staff is recommending approval of a Minor Mining Approval Amendment and establishment of a timeline for submittal of a draft HCP amendment to the USFWS. A Major Mining Approval Amendment is required for the changes that will be addressed by the amended HCP.

The conditions of approval as defined in the April **24, 1968** letter of approval for Dam site 2 require that, upon completion of mining operations the reservoir dam shall be cut to prevent continued impounding of water. The 1998 HCP states that the reservoir will be retained for red-legged frog habitat. The Minor Variation approved in April 1998 states that the proposal for compliance with the conditions of approval of Dam site 2 will be resolved at quarry closure at which time the Service will make a decision to retain the reservoir or substitute equal or greater habitat elsewhere on the quarry site. This issue may be resolved by the HCP amendment and Major Mining Approval Amendment.

- 2.** All mining activities, including clearing, excavation or other disturbances shall be done in conformance with the above Exhibits as revised. Setbacks shall be measured from the property boundary lines **on** a horizontal plane.

Review Comment: Mining operations at Wilder Quarry have not been in conformance with all approved exhibits. (see Section I.)

3. A benchmark shall be established in the Quarry floor during the first five-year interval of mining as described in the above Exhibits in a visible area not proposed for disturbance.

Review Comment: In compliance

4. Prior to issuance of any building permit, new on-site structures shall incorporate appropriate Uniform Building Code requirements and shall be designed by a registered civil engineer.

Review Comment: In compliance

5. A Geotechnical Evaluation of liquefaction potential for areas where new foundations are proposed shall be conducted prior to building within areas of known liquefaction potential. Plans shall be designed in conformance with recommendations that study and shall be reviewed for approval by the Planning Department. (MM G-2)

Review Comment: In compliance

6. The Quarry's engineering geologist shall examine the **workface** on a monthly basis and conduct a Confirmatory Slope Stability Analysis during mining operations and submit a report of site slope conditions with an updated geologic map annually as part of the required annual report. (MM G-3)

Review Comment: In compliance

7. The Quarry work face shall be excavated in compliance with the benching standards set forth by Use Permit **2791-U**, the Santa Cruz County Mining Ordinance, OSHA, MSHA, and in accordance with the above Exhibits.

Review Comment: In compliance

8. Annual inspections of the Quarry face shall be conducted by a State Certified Engineering Geologist to address the conformance with the phased Mining and Drainage Plans and to evaluate unexpected potentially adverse geological constraints that may be encountered during future excavation.

Review Comment: Annual inspections by an engineering geologist have been occurring, however, conformance with the phased Mining and Drainage Plans has not been addressed in the inspection reports. Although operations have not always been in

conformance with the phased Mining and Drainage Plans, this has not created a geologic hazard.

9. A slope-specific geotechnical investigation shall be completed by a registered professional that demonstrates the stability of the oversteep northeastern quarry slope exceeds a factor of safety of **1.2** for the permanent slope. A permanent buffer setback of 100' shall be established through a Declaration of Restriction if a 1.2 factor of safety cannot be established for this slope (**MM-G-4**)

Review Comment: In compliance

10. Prior to excavating, clearing, or otherwise disturbing the land within 200 feet of the mining lease boundary, the mining operator shall provide survey markers at 200-foot intervals to indicate the location of the maximum mining limit. The markers shall be maintained until a clear work face has been established and in compliance with Condition III.A.12 below.

Review Comment: In compliance

11. Silt fences shall be installed and hydro mulching required up-slope of riparian areas and shall be implemented prior to and during all mining activities within the active mining area pursuant to the requirements of Mitigation Measure **G-5a** of the **EIR** prepared for this project. (**MM G-5a**)

Review Comment: Silt fences have been installed and hydro mulching has been applied in the past. However, water quality monitoring of storm water discharge to riparian areas indicates cause for concern regarding the quality of storm water leaving the site. Graniterock has taken steps to improve the quality of storm water that leaves the site, including replacement of ageing silt fences, expanding vegetative filters and establishment and maintenance of an additional sediment basin. These measures have resulted in a decrease in storm water discharge and significant improvement in quality of storm water discharge. More recent storm water quality sampling data confirm this.

12. Prior to mining, the approved mining area shall be surveyed and staked in the field. Protective fencing shall be installed as required by the Planning Director, and in compliance with the requirements of the **HCP/Section 10a** permit, to prevent any additional disturbance to the adjacent riparian areas.

Review Comment: Recent compliance. Areas adjacent to riparian areas were used as bone yards for dilapidated equipment, and for construction debris storage from Graniterock road projects. After meetings onsite with the U.S. Fish and Wildlife Service and the County, these areas were cleared of the materials and fenced for protection during the winter/ spring of 2002.

13. The rate of mining and trucking shall not exceed 250,000 tons per year, except as provided in Condition II.Q. above.

Review Comment: Wilder Quarry exceeded the production limit in 2000 and 2001. In order to rectify the violation created by the increased mining for the year 2000 and 2001, the County required that mining be reduced in the year 2002 by the amount that is over the tonnage limit of 250,000 tons in the years 2000 and 2001. Graniterock accepted this requirement and reduced production at the facility accordingly. Even though production in 2002 was well below the 250,000 ton limit it still exceeded the agreed upon reduced production limit by approximately 6,000 tons. The production for 2003 was again well below the actual production limit of 250,000 tons. Therefore, at this time has reduced production by an amount that accounts for the overproduction in 200 and 2001.

B. Surface Drainage

1. Drainage improvements shall be designed by a qualified professional, and provide for the effective dispersal of runoff. Within 120 days of approval of the HCPI Section 10a permit, or financial assurance approval by the Planning Commission and prior to any disturbance, whichever is sooner as provided in these Conditions of Approval, the Quarry shall provide downstream erosion control at all culverts that could experience flow velocities above 3.5 cfs, or reduce flow velocities to a rate below 3.5 cfs. New designs shall be submitted to County Planning staff for review and approval prior to implementation. Best Management Practices to control sediment in culvert construction areas, including installing culverts during the dry season (April 15-October 15) and revegetation of disturbed areas immediately after installation shall be included on the plans or as approved in the Habitat Conservation Plan Section 10a permit approved by U.S. Fish and Wildlife Service. (MM H-4 and H-6)

Review Comment: In compliance

2. Prior to any disturbance the Final Drainage Plan shall be amended to conform to the requirements of the approved HCPI Section 10a permit as necessary. Plans and calculations shall be submitted to County Planning for review and approval. (MM V-2)

Review Comment: Although Graniterock complied with this condition prior to mining through approval of the Minor Variation in April 1998, subsequent changes have taken place as discussed in the staff report, which require further revision of the final drainage plan. Proposed final drainage and general configuration of ponds at the completion of mining are shown on the amended final grading and drainage plans. However, final fate

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of the ponds, or additional ponds, will be determined by the amended HCP approved by USFWS. This requirement is indicated by a note on the amended plan.

3. The ponds and basins shall be dredged as needed to maintain adequate storage capacity as shown on the drainage plan.

Review Comment: The settling pond on the south side of Highway 1 approved for use during mining was allowed to completely fill with deposits and dried out. As a result, Graniterock began to use the second former settling pond on the south side of Highway 1, which was not approved for use during mining. Otherwise ponds and basins have been dredged as needed

4. Prior to reuse of Settling Basin 3 for additional settling capacity, engineered plans for levee design and stability including potential for liquefaction shall be submitted to County Planning for review and approval.

Review Comment: In compliance

5. Measures provided in the "Revised Drainage Study," Robert DeWitt and Associates, Revised May 1996, "Erosion Control Plan," Robert L. DeWitt and Associates, Inc., Revised 9/27/96, and the "Revegetation Plan, Wilder Sand Plant, Habitat Restoration Group, Revised April 22, 1996, shall be implemented, as amended per the requirements of the HCP/Section 10a permit approval. All erosion control work shall be completed before October 15 of each year. Quarry shall implement Best Management Practices to control erosion from unpaved surfaces. (MM H-6, H-1, H-3)

Review Comment: Graniterock has deviated from the approved drainage plan and conducted operations in a manner that has increased the potential for erosion. Even so, virtually all storm water runoff from operational areas is captured in sediment ponds. Graniterock reports that the ponds have been able to contain all of the storm water runoff with no discharges.

Other areas within the site outside the operational mining area discharge storm water runoff directly to natural drainage courses. To filter sediment from storm water prior to discharge into Old Dairy Gulch or Sandy Flat Gulch silt fencing, vegetative filter strips and other erosion and sediment control measures have been implemented.

6. Monitoring of runoff discharge into all natural drainage courses by an independent laboratory and/or the installation of a continuous monitoring device shall be required. The results of the monitoring shall be submitted to the Planning Department at the quarterly mining inspections and included in the annual report.

ii Comment: Graniterock has conducted the required monitoring and has submitted the results with the annual report. The storm water quality monitoring report provided to the County is a copy of the report that is required to be submitted to the Central Coast Regional Water Quality Control Board in compliance with the General Permit for Storm Water Discharges Associated with Industrial Activities. The report includes collecting and analyzing samples from storm water; quarterly visual observations of all drainage areas for signs of unauthorized discharges; and, during the wet season, monthly visual inspections of storm water discharge at all drainage area discharge points. See review comment for mitigation measure 5 under I.A above.

C. Groundwater Protection

1. Channels which are designed to concentrate and direct Quarry runoff into the sediment pond detention system shall be armored with erosion resistant materials (such as rip-rap) at points of potential gullyng. The areas to be protected shall be decided by the Quarry's consulting civil engineer and detailing included in the annual report to the County.

Review Comment: In compliance

2. The surface area of the Quarry which is stripped, mined or otherwise disturbed at any given time shall be minimized to the greatest extent compatible with reasonable mining and marketing requirements.

Review Comment: Graniterock has not minimized the area of disturbance at Wilder Quarry according to the approved mining plans. See review comment under I.F above.

3. Reclamation and revegetation of each Quarry bench shall be done as soon as possible, upon completion of mining operations on that bench, in accordance with the revegetation plan.

Review Comment: In compliance

4. Quarry storm water runoff control facilities into natural channels shall be in compliance with the approved Storm Water Prevention Plan and/or limits as set forth in the Regional Water Quality Control Board NPDES (discharge) Order. An updated copy of the NPDES Order, and/or Stormwater Prevention Plan shall be on file at County Planning prior to commencement of mining activities. All water quality monitoring and reporting requirements specified in the RWQCB Orders shall be complied with, and are included as conditions of this permit by reference.

Review Comment: This mine operates under an Industrial Activities Storm Water General Permit issued by the Central Coast Regional Water Quality Control Board

(RWQCB). The storm water permit requires the preparation of a Storm Water Pollution Prevention Plan, which Graniterock has done. In compliance with their storm water permit Graniterock submits annual reports to the RWQCB and a copy to the County. Past reports have indicated cause for concern regarding quality of storm water leaving the site. Currently, the mine is in compliance with this condition as explained in review comment H-5 under I.A above.

5. The 1996 Drainage Plan by Robert L. DeWitt Engineering and the Erosion Control Plan (as amended) shall be implemented to offset potential erosion and sedimentation. The erosion control measures are to remain in effect from October 15 through April 15 of each year.

Review Comment: See review comment under III.B.5. above.

6. Prior to resumption of mining, a plan implementing Best Management Practices to control Fuel, Oil and Solvents on the property, and a Spill Prevention Plan, in compliance with County and State regulations, including double containment at all fuel storage and handling areas, shall be submitted to County Planning and County Environmental Health Services for review and approval. All approved measures of the Spill Prevention Plan shall be implemented prior to commencement of mining activities. (MM H-7)

Review Comment: Initially, equipment maintenance and refueling was performed by mobile equipment that was not stored on site. Currently, Graniterock does store such hazardous materials on site and has obtained the required permit to do so from the County of Santa Cruz Environmental Health Department.

7. Future pumping rates for Wilder Well #1 shall be limited to 175 gpm. Monthly monitoring of pumping rates shall be included in the required annual report. (MM H-8a)

Review Comment: Graniterock submits monthly meter readings and has installed a flow restriction device to limit pumping to no more than 175 gpm.

8. Prior to resumption of mining, a Constant-Discharge pumping test of 72 hours minimum duration to determine transmissivity of the aquifer and how it responds to pumping conditions shall be performed by a professional qualified to perform such tests. The test shall be followed by a recovery test and the monitoring of at least 3 nearby wells to determine area groundwater impacts. The test results shall be submitted to the County Planning hydrologist. Test results may require modification of pumping at Well #1 to ensure production of this well will not contribute to groundwater overdraft in the area. (MM H-8b)

Review Comment: In compliance.

9. A baseline Groundwater Monitoring Program including groundwater levels and quality shall be implemented. The first round of monitoring shall be completed prior to resumption of mining. This program must include a continuous 7-day groundwater level monitoring period in Wilder Wells #1 and 21E01. The results of this continuous daily monitoring shall be submitted to the County Planning hydrologist to verify the potential for seawater intrusion. If this constant monitoring shows tidal influence on groundwater, the applicant shall remedy the problem by submitting a hydrologic report with a list of recommendations including a proposal for barrier extraction wells installed seaward of Wilder Well #1, which address the seawater intrusion issue for review and approval by County Planning. Aquifer storage and retrieval concepts should be evaluated including storage of surface water in the underground aquifer using percolating ponds or injection wells, and a retrieval system. Groundwater monitoring shall also include installation of a new monitoring well located on the first emergent terrace near the shoreline. This well shall be screened within the Santa Margarita Sandstone formation at shallow and deep intervals. (MM H-9 and H-1 1b)

Review Comment: In a report date April 1998 Weber, Hayes & Associates demonstrated compliance with this condition. It was determined that seawater intrusion is not a threat.

10. Prior to resumption of mining, a dedicated Piezometer shall be installed in the vicinity of detention pond #3. The piezometer shall be installed by a California licensed C-57 drilling contractor in accordance with California Department of Water Resources specifications. It shall be designed to screen any potential perched groundwater within the 50-70 foot elevation range. The bottom of the unconfined water table surface shall be within the 25-40 foot elevation range. The bottom of the piezometer shall be no less than 50 feet below sea level. Periodic measurements shall be taken on a quarterly basis for the first 5 years of mining to document the absence of a water table shallower than 20 feet below the maximum quarry depth of the 55 –foot elevation. The quarry shall notify County Planning if piezometer measurements of water table levels show 20 feet separation between mining and the groundwater table. Monthly piezometer level readings shall be incorporated into the required annual report. Piezometer measurements of water tables shallower than 20 feet below the maximum mining floor depth shall necessitate one or both of the following actions, as determined by the County Planning Director exercising reasonable discretion:

- (a) Cessation of mining within the 5 year quarry area and increase the maximum allowed depth within the 10-year and 15-year areas to compensate for the loss of production in the 5-year area: or
- (b) Implementation of a groundwater protection plane in the 5-year quarry area using a barrier created by extraction wells down gradient of detention pond #3. (MM H-10)

Review Comment: First, it should be noted that the text of the condition is misleading. The proposed maximum quarry depth on the approved mining plans is 75 feet above mean sea level (msl). Therefore, in order to maintain 20 feet of separation between mining and groundwater, the purpose of the piezometers is to ensure that groundwater is no higher than 55 feet msl at the location of maximum depth of mining. Groundwater monitoring wells have been installed at Wilder Quarry, which have documented the presence of groundwater within 20 feet of the ground surface at the sand processing plant. It appears that shallow groundwater is a pre-existing condition in the lower portions of Sandy Flat and Old Dairy Gulches, where the sand processing plant is located. Additional groundwater monitoring wells have been installed near the mining area to help ensure that 20 feet of separation is maintained as mining progresses. In addition, exploratory pits 20 feet deep have been excavated in the mining floor to confirm the absence of shallow groundwater. This type of monitoring to ensure the maintenance of at least 20 feet of separation to groundwater will continue as mining progresses.

At the request of County staff, Graniterock has completed numerous groundwater investigations, which are summarized in the staff report.

D. Reclamation/Revegetation

1. The Quarry reclamation plans shall conform to the Santa **Cruz** County Mining Ordinance Reclamation Standards (County Code Sections 16.54.050 and .055, SMARA, and the Exhibits of this permit.

Review Comment: The approved Reclamation plans are in conformance. However, the Reclamation Plan approved in 1996 must be revised to reflect subsequent operational changes at the mine. The changes are shown in the amended plans.

2. Reclamation activities requiring major earth moving activities shall be conducted during the dry season (April **15** - October 15) to prevent potential increase in sediment loading to watercourses. (**H-12** and **V-12**)

Review Comment: Reclamation activities, which require major earthwork, have been undertaken during the dry season.

3. Riparian habitat impacts shall be minimized by implementation of the following requirements:

- (a) All road construction and mining activities shall be kept a minimum of 50 feet away from the outward edge of riparian vegetation along Old Dairy and Sandy Flat Gulches. (MM V-1a)

Review Comment: Mining activities have encroached into the protected riparian area along Old Dairy Gulch. Two issues of non-compliance occurred during 2001-2002. Sediment was cleaned out of the Habitat Conservation Plan (HCP) mitigation ponds, and spread for approximately 400 feet within the protected riparian area. Additionally, material was placed within the protected riparian area adjacent to a clay-settling pond south of Highway 1.

There were also other areas where scrap materials, equipment, and construction debris were located within 30 feet of the riparian vegetation associated with Sandy Flat and Old Dairy Gulches. These items have recently been removed from the protected area, and the areas have been treated for erosion control and fenced. Currently, the mine is in compliance with this condition.

- (b) Areas disturbed by new culvert installation shall be revegetated immediately with willow cuttings according to the success criteria and remedial measures in the Revegetation Plan, approved for this project. (MM V-1b)

Review Comment: In compliance

4. Ponds used as settlement basins shall be maintained after mining to provide habitat for the red-legged frog consistent with the requirements of the Habitat Conservation Plan Section 10a permit approval by U.S. Fish and Wildlife Service. (MM V-17)

Review Comment: Condition compliance will be confirmed at cessation of mining.

5. The Reclamation Plan shall be revised to address habitat requirements for the red-legged frogs. (MM V-18)

Review Comment: The Reclamation Plan, in particular the Revegetation Plan has been revised a number of times since the original approval. However, none of the revised versions fully complies with this requirement. A new revegetation consultant has prepared an amended revegetation plan, which complies with SMARA and County Mining regulations. However, the outstanding issue is the performance standards for red-legged frog habitat in the ponds (See I.J. above). Until an HCP amendment is approved by the USFWS it is not known exactly what changes, if any, may be needed to the amended revegetation plan and performance standards.

6. To ensure that non-native fish or bullfrogs are not inadvertently introduced into the quarry drainage system, bullfrogs and predatory fish shall be controlled annually by measures consistent with the Habitat

Conservation Plan Section 10a permit approval by U.S. Fish and Wildlife Service. (MM V-19).

Review Comment: In compliance

7. Graniterock shall implement a worker education program for quarry personnel and other persons who may be working in or near red-legged frog habitats. All workers who could come into contact with red-legged frogs shall be required to attend at least one instructional meeting. (MM V-20)

Review Comment: Graniterock has undertaken an educational program.

8. A qualified biologist shall conduct pre-construction surveys in pond or creek sites scheduled for vegetation or sediment removal. If red-legged frogs are present and would not restrict mining operations, disturbance shall be restricted to between September 15 to January 15 (non-breeding season) as approved by the U.S. Fish and Wildlife Service. Frog relocation activities shall occur only as approved by the U.S. Fish and Wildlife Service through the approved Habitat Conservation Plan Section 10a permit. Surveys shall be included in the Quarry's annual report to the County. (MM V-21)

Review Comment: Pre-construction surveys have been conducted in pond and creek sites. Other activities in sensitive riparian areas, some during the breeding season, have occurred which have not had pre-construction surveys.

9. Excess sediment and vegetation required for removal shall be conducted in a manner consistent with the approved Habitat Conservation Plan Section 10a permit. Removed sediment shall be disposed of in a manner that does not result in erosion, and revegetated pursuant to the requirements of the Revegetation Plan. To reduce loss of red-legged frog habitat, the number of points of access for sediment excavation/removal and the area of disturbance shall be minimized. (MMV-22)

Review Comment: As explained in the staff report, sediment and vegetation removal in operation ponds has not been conducted in a manner consistent with the HCP.

10. The use of chemical weed control in aquatic habitats, including riparian streamside vegetation is prohibited. (MM V-23)

Review Comment: In compliance

E. Traffic/Circulation

1. The quarry shall maintain an active information program for the shippers and drivers regarding speed **limits**, and maintaining truck routing through the City of Santa Cruz.

Review Comment: In compliance

F. Air Quality

1. Unpaved Quarry roads shall be watered or sprayed with lignin sulfonate or other environmentally approved dust retardant to reduce fugitive dust. (**MM H-5, G-6 and G-5b**)

Review Comment: In compliance

2. All equipment and processing facilities shall be maintained in accordance with APCD standards for stationary sources.

Review Comment: In compliance

3. Revegetation in accordance with the approved Reclamation and Vegetation Plan shall be initiated as soon as practical in order to minimize fugitive dust.

Review Comment: The Wilder Quarry has not been mined per the approved Mining Phasing Plan, which has resulted in substantially more area stripped of vegetation than anticipated or evaluated in the EIR. Revegetation did not taken place per the approved Revegetation Plan. More recently, Graniterock has revegetated areas that were stripped of vegetation prematurely, established revegetation test plots and implemented revegetation efforts in previously mined areas. Presently, the area of the mine stripped of vegetation is consistent with that envisioned in the original mining phasing plan.

4. The quarry shall install and use water sprays during all dry screening operations and at all dry material transfer points. (**MM AQ-5a and 5b**)

Review Comment: In compliance

5. Prior to reactivation of mining activities, the Quarry access road shall be paved to a width necessary to ensure that all sand trucks remain on a paved surface from the time they leave the truck scale area until they enter Highway One.

Review Comment: In compliance.

G. Aesthetics

1. The Quarry shall permanently retain the existing grove of Eucalyptus, Monterey Cypress and Monterey pine trees to screen views of mining activities from Highway One. If any part of the grove is removed (**i.e.** fire, disease) a new screening shall be implemented immediately using a combination of earth berms, fencing and planting that is designed to be harmonious with the aesthetics of Wilder Ranch State Park and the surrounding area. (**MM A-1**)

Review Comment: In compliance

2. Aesthetic buffers of native vegetation shall be planted to screen views of site facilities including fencing of mining areas. The Quarry shall use appropriate colors for equipment and facilities (**i.e.**, **non-reflective** and **non-bright** colors and materials). (**MM A-2**)

Review Comment: Aesthetic plantings have occurred. The result of these plantings has yet to achieve the desired effect of providing screening of the *quarry* and facilities from the surrounding area.

H. Protection of Paleontological Resources

1. In the event that potentially significant paleontological resources (**i.e.** significant skeletal remains that might substantially contribute to knowledge of prehistory) are found during mining operations, all work shall be halted within 200 feet of the find and the Planning Director shall be notified immediately. A qualified paleontologist, as approved by the Planning Director, shall be retained to assess the significance of the find and implement mitigations measures recommended as a result of such assessment, consistent with the County's Paleontological Resource Protection ordinance.

Review Comment: In compliance

I. Operating and Shipping Hours

1. Hours of Quarry operation shall be 5:00 a.m. to 3:30 p.m., Monday through Friday.

Review Comment: In compliance. In 1998 a Minor Variation was granted allowing Graniterock to extend these hours until 5:30 pm for a limited period of time, from July 29 to August 28, 1998.

2. Shipping operations shall be confined to between the hours of 5:00 a.m. to 7:00 a.m., with reduced shipping at the rate of two trucks per hour allowed during 7:00 a.m. to 9:00 a.m., resuming normal shipping at 9:00 a.m. to 3:00 p.m. for shipments through the Mission Street corridor

Monday through Friday. Shipments northward may occur during 5:00 a.m. to 3:30 p.m. Monday through Friday.

Review Comment: In compliance. In August 2000 a Minor Variation was granted allowing more shipments of sand between 7 am and 9 am for the Mission Street widening project or if the trucks are empty and returning from delivery to Davenport Cement Plant and allowing sand shipments to begin at 3 am.

3. Maintenance operations shall be conducted from 5:00 a.m. to 8:00 p.m. Monday through Friday.

Review Comment: In compliance

J. Fence/Public Safety

1. The entire mining site shall be fenced for safety and maintained by the owner or operator, to protect public safety in conformance with County Code Section 16.54.050(c)11.

Review Comment: Fencing of the mining site has been completed in substantial compliance with this condition. A portion of the eastern edge of the quarry has not been fenced. This is a deeply incised drainage with very dense vegetation. The rugged terrain and dense vegetation eliminate the need to fence this area.

2. The Quarry shall implement and maintain a Fire Protection and Evacuation Plan for persons employed in the mining operation. The plan shall implement Best Management Practices for reducing fire hazards from mining activities. (MM F-3, F-5b and 5c)

Review Comment: In compliance

K. Posting of Signs

1. Within 90 days after this Certificate of Compliance has been granted and continuously thereafter, the outer boundaries of the mining lease area shall be continuously posted with signs in such a manner as will reasonably give notice to the public of matters contained in such notice, stating in letters not less than four inches in height: "MINING APPROVALS" and stating in letters not less than one inch in height: "THIS PROPERTY MAY BE USED AT ANY TIME FOR THE MINING AND PROCESSING OF ROCK, SAND, GRAVEL OR MINERALS." Said signs shall be maintained in legible condition at all times.

Review Comment: In compliance

IV. MITIGATION MONITORING PROGRAM

The mitigation measures contained in Exhibit "A" of this permit have been incorporated into the conditions of approval for this project in order to mitigate or avoid significant effects on the environment. Exhibit "A" of this permit specifies which mitigation measures are the responsibility of the applicant. As required by Section **21081.6** of the California Public Resources Code, the monitoring and reporting program contained in Exhibit "A" is hereby adopted as a Condition of Approval for this project. The purpose of this monitoring is to ensure compliance with the environmental mitigations during project implementation and operation. Failure to comply the conditions of approval, including the terms of the adopted monitoring program, may result in permit revocation pursuant to Section **18.10.462** and **16.54.090** through **.098** of the County Code.

Review Comment: Non-compliance. See Section I.A.

Permit Review

Use Permit 2791-U

IN GENERAL

As used in this use permit, Applicant means Granite Rock Company, Inc.

USE

This permit, subject to the terms and conditions listed, authorizes and permits, (a) the removal, processing, storage, transportation and selling of natural materials, and (b) the installation and operation of machinery and equipment for the removal, processing, storage, transportation and selling of natural Materials, including a covered belt conveyor and rail loading facilities on that property shown and delineated on Exhibit "A".

TERMS AND CONDITIONS

The use permitted and authorized hereunder shall be subject to the following terms and conditions:

1. Application is hereby modified to include only a request to remove, process and sell natural materials. The right to remove and process natural materials shall be limited to those areas described in Exhibit "A" as mining areas and processing areas. Those areas described in Exhibit "A" as being buffer areas left in place shall not be mined but shall be left in a natural state and not be used for any purpose whatsoever, not even for storage of equipment and supplies. (Exception to above: "Buffer area in northerly portion of site may be used for water reservoirs.

The Application and Permit hereunder does not include the right to add or build a ready mix or asphalt mix plant without further application for a use Permit.

Review Comment: In compliance; this condition has been augmented by conditions of COC 92-0331.

2. No truck haulage of finished materials shall be permitted from the premises through the existing ingress-egress point until there have been provided improvements to the entranceway which shall include at minimum those features and concepts of traffic chanalization and control as embodied in Exhibit "D", attached. If an Encroachment Permit for the improvements mentioned above is denied, or none other design is required by the State Division of Highways, then this condition (No.2) shall be subject to review by the Board of Zoning Adjustment.

Review Comment: In compliance.

3. In order to screen all operations within the subject site from Highway 1 as soon as possible, applicant shall:
 - a. Within one year from the date of this permit the screen planting program, as defined by landscape plan labeled Exhibit "C", on file, shall be completed.
 - b. Thereafter, landscaping shall be diligently maintained by applicant to maximize growth potential of the plant materials.

Review Comment: In compliance; this condition has been augmented by conditions III.G.1 and III.G.2 of COC 92-0331.

4. Coincident with the initial installation of the processing plant, applicant shall construct, maintain and operate rail-loading facilities capable of handling ten carloads of materials per day. Transport of materials from quarry site to rail loading facilities shall be by covered conveyor belt system developed under State Highway 1, in accordance with requirements of the State Division of highways.

Review comment: In compliance; this condition has been amended by condition ~~110~~ of COC 92-0331.

5. **No** waters used in the mining, processing **and/or** storage of materials shall be discharged into any natural watercourse or the Pacific Ocean, nor shall they be placed at a location **and/or** in a manner where they might later pass into a natural watercourse of the Pacific Ocean.

Review Comment: For the current mining area approved under COC 92-0331 the drainage calculations demonstrate the adequacy of all ponds to contain the runoff from a 50-year, 6-hour storm event. The code requires capacity to contain runoff from a 10-year, 6-hour storm event. Graniterock reports that the ponds have been able to contain all of the process water with no discharges.

6. Drainage facilities and devices to control storm water runoff shall be constructed as required in order to minimize erosion and prevent pollution of the Pacific Ocean by sand, silt, **or** other materials which in any way will result in damage to fish or marine plant life.

Review Comment: Not all storm water runoff from the site is captured by ponds. For the current mining area approved under COC 92-0331 Graniterock has constructed facilities and devices to prevent sediment-laden runoff leaving the site and collects water quality data monitoring data. See H-5 under I.A above.

7. Prior to construction of settling ponds, slurry ponds, water reservoirs, or storm drainage facilities, final plans based on design by a Registered Civil Engineer shall be approved by the Department of Public Works.

Review Comment: In compliance

8. All ground areas exposed by quarry operation with slopes steeper than 5% or which are otherwise subject to erosion, shall be provided with a suitable ground cover to prevent erosion insofar as possible.

Review Comment: See I.I above

9. Cut slopes, both during quarrying and upon completion, except those mining faces under active hydraulic mining procedures and except the existing exposed mining face, shall not be steeper than 1:1. Any slope greater than 1½:1 shall not exceed a height of 30 feet without benching. Benches shall be 12 feet in width to facilitate interception and storage of loose material, drainage, maintenance equipment and future landscaping. Benches shall be sloped to form a valley at least one (1) foot deep near the toe of the upper slope and access of maintenance equipment shall be provided where feasible.

Review Comment: The quarry slopes are excavated in conformance with this condition, the Santa Cruz County Mining Ordinance, OSHA, MSHA, and in accordance with the exhibits of COC 92-0331.

10. Upon cessation of mining activities within any portion of the site, applicant will leave said area in a neat, clean and orderly condition, free of debris, materials, and equipment, and shall establish plant material so as to restore the site as nearly as practical to its original state of ground cover.

Review Comment: Under the Reclamation Plan approved under COC 92-0331 previously mined areas are in the process of being reclaimed in accordance with this condition and the current mining area will be reclaimed accordingly.

11. Notwithstanding any of the foregoing conditions, not later than June 30, 1990, the permittee shall submit for approval by the governing body of the political jurisdiction then in control, a specific plan for the reuse of the land included under this permit and a program for its implementation satisfactory to said governing body. Said plan shall be prepared by a qualified landscape architect or land planner. In no case shall said plan specify grades and slopes more severe than those shown on Exhibit "B".

Review Comment: This condition has been amended by condition II.P of COC 92-0331.

12. Dust or other such materials originating from operations including the covered conveyor belt system shall be held to a minimum by dust arresting equipment on the conveyor system and the use of water wagon or other dust control devices. In no case shall dust be permitted to blow or be carried onto adjacent lands or onto public roads in the vicinity. All operations shall comply with the rulings and regulations of the local Air Pollution Control Board as such might be established.

Review Comment: In compliance

13. All requirements of the Regional Water Quality Control Board shall be met.

Review Comment: This mine operates under a General Industrial Activities Storm Water Permit issued by the Central Coast Regional Water Quality Control Board (RWQCB). In compliance with their storm water permit Graniterock submits annual reports to the RWQCB and includes copies of these reports in their annual reports to the County.

14. **Statements** of applicant contained in Exhibit "**E**" and "**F**", except those conflicting with the foregoing conditions, are hereby incorporated as conditions of this Use Permit.

15. Failure to comply with any one of the foregoing conditions shall be cause for revocation of this Use Permit.

Review Comment: This is a report to the Planning Commission of substantial non-compliance with permit conditions and exhibits. This staff report provides recommendation to ensure that the non-compliance issues are resolved in a timely manner. At this time, the staff recommendation does not include a recommendation to set a hearing to consider revocation of the COC. However, the Planning Commission may direct staff to set such a hearing.

16. **Applicant** shall have five (5) years from this date to exercise this permit.

Review Comment: In compliance

17. **Applicant** shall install, at their own expense, adequate street lighting at the entrance to the sand quarry on Highway 1, said streetlights to be in accordance with the recommendation of the Pacific Gas and Electric Company and approved by the Director of Public Works, County of Santa Cruz.

Review Comment: In compliance

MEMORANDUM

Date: August 25, 2005

To: David Carlson

From: Kevin Crawford, PE and Joe Hanna, CEG

Re: Embankment Repair-Wader Sand Quarry, 92-0331, Review of URS Report dated August 8, 2005

As you have requested, we have reviewed the subject letter dated August 8, 2005 from URS Inc., a geotechnical engineering company, that Graniterock employed to complete the engineering for the subject repair. URS wrote this letter after the County discovered that the quarry operator had filled three large slope erosion rills on the south side of the Pond 106 embankment. The URS letter's stated purpose "is to *verify that the repair was constructed in substantial conformance with our earthwork guidelines (see attached Figure 2.)*". In order to aid in our review of this letter we have examined the Quarry files, aerial photographs, and other related information.

Background

Sometime during the winter of 2004 to 2005, three large erosion rills developed along the southwestern embankment of Pond 106. Quarry personnel were unaware of the problem until Dana Bland, Graniterock's consulting Wildlife Biologist noticed the problem during a field inspection. Ms. Bland notified the company of the problem on February 17, 2005. In April 2005, Graniterock retained URS to review the southwestern embankment slope of Pond 106. During this visit, URS staff visually inspected the site of the three rills, but completed no testing, and did not prepare a conventional soils report. Instead, they produced a three-page letter including Figure 2 to document their discussions with quarry staff and to clarify their recommendations. URS staff visited the site four times while the corrective grading occurred along the southwestern embankment slope.

Review of the Report

County Code and SMARA Code primarily requires that any quarry fill slope be compacted as appropriate for the approved end use. Code also requires that quarry fill slopes shall not exceed 2:1 (horizontal: vertical), except when a site-specific geologic and engineering analysis demonstrates steeper slopes are stable. The August 8, 2004 URS report **does** not address either of these requirements. Rather, URS report simply provides a defense of the grading work that Graniterock completed during their repair of the subject embankment failure. URS concluded not that the work was completed in accordance to their figure, or to County or SMARA requirements, but rather that the grading work met the "project objective of restoring the slope to be consistent with the remaining slope not affected by erosion." Several areas of the report are not in conformance with the County and SMARA Code requirements. Three areas would potentially compromise the long-term stability of the slope: these include: 1) compaction requirements, 2) slope face steepness, and 3) conformance to the URS recommendations. Our comments regarding these areas are as follows:

Compaction: Conventional compaction tests were not performed during the reconstructive grading. Field observations during the grading used a steel rod, from which the URS engineer determined that some of the core material was adequately compacted. After the County was informed of the corrective grading, and expressed concern about the compaction of the fill, the civil engineer took four random samples of the "outer shell" of the fill material. The results of these samples indicate that the face of the slope has compaction that is "less than desirable."

Steepness of the face of the fill: The face of the fill was proposed at a slope of 1:1, but was actually constructed steeper than 1:1. The final fill slope is therefore much steeper than the 2:1 slope required by Code, and also steeper than the 1½:1 slope analyzed in the March 5, 1999 report by URS. The results of the 1999 report showed that the 1½:1 slope was barely stable. By reference to the March 5, 1999 report, the reconstructed slope that is steeper than 1:1 is potentially unstable.

URS Recommendations in Figure 2: URS's Figure 2 indicates shallow benches and fills of 5 feet or less in depth, and a keyway length of less than 20 feet at the base of the slope. As can be seen from the photos in Figure 3, the reconstructive grading actually included keyways between 10 and 15 feet deep and over 100 feet long. Our field observations show little similarity between the configuration depicted in Figure 2 and the reconstructive grading work completed by Graniterock. This discrepancy is not addressed in the URS report.

Summary and Recommendations:

The slope repair along the southwestern embankment of the Pond 106 does not comply with Code or with the recommendations proposed by URS in Figure 2. **This** embankment's stability is important to protect Sandy Flat Gulch and the roadways on the top and toe of the slope. We believe the embankment will fail and/or rapidly erode during periods of intense rainfall.

The most optimistic interpretation of URS August 8, 2005 letter leads to the conclusion that the outer portion of the recent slope repair is loose, and, as recommended by URS, will need correction before revegetation. URS recommends "densification of the outer 3 feet of this slope face" to provide a **firm** surface for revegetation. County staff recommends instead that the reconstructed fill be replaced as engineered fill meeting all URS recommendations and Code requirements. Because the fill is greater than 30 feet in vertical height, a mid-height terrace **is** also required.

Now that Graniterock intends to leave Pond 106 in place after reclamation, further investigation and evaluation of **all** the embankments around the pond is required. To accomplish **this** evaluation, a testing program must be initiated that includes a series of geotechnical borings at 50-foot intervals, ten feet from the edge of the embankments, and extending 10 feet into the native materials. Appropriate samples must be retrieved from these borings for testing to determine the materials shear strength and consolidation potential.

We agree with URS that DMG Special Publication 117 provides appropriate guidance for analyzing the stability of these embankments, and these guidelines should be **used** to examine and analyze the embankments. County staff uses the standards presented in ASCE Los Angeles Section Geotechnical Groups "Recommended Procedures for Implementation of DMG Publication 117" to review this type of analysis. Any investigation should follow the procedures outlined in that document. The County's goals for the new investigation is to have URS thoroughly examine the Pond 106 embankment's short- and long-term stability, and then, depending upon the outcome of the analysis, make recommendations to stabilize the embankments, if necessary, to assure long-term stability.

