Hearing Date 01/24/91
Agenda Item 3
Approval Date 02/04/91



County of San Bernardino

745DSN88004199SMAR02/04199SM2 SAMR/89-0332/DN166-203N

MINING/RECLAMATION PLAN (91M-01)

CALIFORNIA PORTLAND CEMENT COMPANY SUPERIOR SILICA MINE

APPROVED

CALIFORNIA PORTLAND CEMENT COMPANY P.O. BOX 947 COLTON, CA 92324-0514

THIS MINING/RECLAMATION PLAN EXPIRES ON JANUARY 31, 2011

			y Y
			5
		·	
			•
•			

MINING CONDITIONAL USE PERMIT AND RECLAMATION PLAN

Addressed to: California Division of Mines and Geology Reclamation Office 650-B Bercut Drive Sacramento, CA 95814 Responsible Agency: San Bernardino County Planning Department Project Title: <u>SUPERIOR SILICA MINE</u> Reclamation Plan Number: 91M-01 Expiration Date: 1/31/2011 Name of Project Proponent: <u>CALIFORNIA PORTLAND CEMENT COMPANY</u> Address of Project Proponent: P.O. BOX 947 COLTON, CA 92324-4260 Project Location: APPROXIMATELY 2.5 MILES NORTHEAST OF ORO GRANDE, ON THE NORTHWEST SLOPE OF QUARTZITE MOUNTAIN JUST SOUTH OF ORO GRANDE CANYON. (T6N, R4W, SEC 9 AND 16) Type of Operation <u>HILLSIDE</u>, <u>MULTI-BENCH QUARRY</u> Mineral Commodity <u>QUARTZITE</u> Quantity of Ore _____100,000_ (tons) per year Estimated Operation Life ___50 __ years Estimated Termination Date 1/31/2011 Area to be mined and reclaimed: 30 acres Total holdings 44.21 acres Maximum Anticipated Depth 380' from top bench to quarry floor Reclamation Time Frame 20 years Reclaimed to <u>natural open space</u>. Quarry benches will be blasted to achieve final overall slopes of 1.5:1, overburden piles shall be graded to have final slopes of 2:1, and a revegetation and monitoring program will be implemented. Effect on Future Mining Reclamation of the site will not preclude future mining if mineral resources still exist after this operation. Draft Copy of Mine Site Approval Reclamation Plan Available at: San Bernardino County Planning Department 385 N. Arrowhead Avenue San Bernardino, CA 92415-0182 Contact person Randy Scott, Environmental Team Telephone (714) 387-4099 Andrew J. Rush, Environmental Team

Date JUNE 17

This and supplemental documents for the nonproprietary portions of the:

CALIFORNIA PORTLAND CEMENT COMPANY

SUPERIOR SILICA MINE

are on file with the:

San Bernardino County
Planning Department
385 N. Arrowhead, 3rd. Floor
San Bernardino, CA 92415-0182

and the:

California Division of Mines and Geology Reclamation Office 650-B Bercut Drive Sacramento, CA 95814

This Mining/Reclamation Plan, approved by the San Bernardino County:

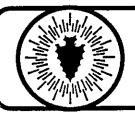
PLANNING COMMISSION

complies with the Mining/Reclamation Plan requirements of both the San Bernardino County Development Code, Title 8, Division 10, Chapter 1, Surface Mining and Land Reclamation and the California Surface Mining and Reclamation Act (SMARA) of 1975.

The issuance of a Conditional Use Permit for Mining/Reclamation by San Bernardino County, neither constitutes an endorsement of the project, nor a testament to the validity of the ore body.

•								
To:	Office of Planning and Research		Fre	From: (Public Agency) San Bernardino County				
	1400 Tenth Street, Room 121		385 North Arrowhead Avenue					
	Sacramento, C.	A 95814	San Bernardino, CA 92415					
<u>X</u>	County of S	ne Board of Supervisan Bernardino ownead Ave., 2nd F. lino CA 92415-0	loor					
			Subject:					
Filing of	Notice of Deter	mination in complian	ce with Secti	on 21108 or 2	1152 of the Public	Resources Code.		
SEE I	ABEL				•			
Project Tit				-				
					(77.4)	007. / 155		
Com Classic			Andrew			387÷4155		
	nghouse Number to Cleaninghouse)		Lead Agen	cy	. Area Code	/Telephone/Extension		
SEE I	<u> </u>		. Conzerrei	SC DATES ID COMMUNITY	:745DSN88004199 :ORO GRANDE :SAMR/89-0332/DI	·		
Project Lo	cation (include	county) .		•	•			
Project Description: SEE LABEL		••		APPLICANT PROPOSAL	:CALIFORNIA POR :MINING/RECLAMA ESTABLISH A QU ON 48.21 ACRES	FLAND CEMENT CO FION PLAN TO RE- ARTZITE OPERATION		
		• .		LOCATION	OF INTERSECTION HWY & MILL STR	2 MILES NORTHEAST N OF NATIONAL TRAI EET		
This is to ad $1/2$	ivise that the	San Bernardin Planning Con Slead Agency Rec and has made the follow	nmission sponsible Agency	h	: RAINS, JOHN as approved the above			
·	(Date)				•	5,421		
1. Th	e project [[will	[X]will not] have a signifi-	icant effect on t	he environment				
2.	An Environmen	ını İmpacı Report was pro	epared for this	noiect pursuant	to the provisions of C	EOA.		
		laration was prepared for		-	•	_ 、		
		s (X)were were not) m		-				
		rriding Considerations [
					is project			
5. F 11	uoruāz (□mes≘ [Were not) made pursuan	it to the provision	ons of CEQA.	•	,		
This is to ce	rully that the final	EIR with comments and	responses and re	cord of project a	approval is available to	the General Public at:		
1	usliew	A Push	1/	24/41	` Plann	er		
Signature (I	Public Agency) (Date	· · · · · · · · · · · · · · · · · · ·	Title		
		\mathcal{A}			*	•		

Date received for filing at OPR:



NEGATIVE DECLARATION

385 North Arrowhead Avenue, San Bernardino, CA 92415-0182

Project Description

Vicinity Map

DATES ID :745DSN88004199SAMR02/04199SM2 COMMUNITY :ORO GRANDE FILE/INDX :SAMR/89-0332/DN166-203N

APPLICANT :CALIFORNIA PORTLAND CEMENT CO
PROPOSAL :MINING/RECLAMATION PLAN TO REESTABLISH A QUARTZITE OPERATION

ON 48.21 ACRES

LCCATION

:APPROXIMATELY 2 MILES NORTHEAST OF INTERSECTION OF NATIONAL TRAILS
HWY & MILL STREET

REP('S) : RAINS, JOHN

National Barstow TRails HWY **(3**) froject 395 Oro Grande *Victorville*

FEb. 4 1991

Effective date of Negative Declaration (after 10-day appeal period)

Plans and specifications for the referenced project are available for public inspection in the Planning Department.

Pursuant to provisions of the California Environmental Quality Act and the San Bernardino County Environmental Review Guidelines, the above referenced project has been determined not to have a significant effect upon the environment. An Environmental Impact Report will not be required.

Reasons to support this finding are included in the written Initial Study prepared by the San Bernadino County Planning Director.

This decision may be appealed by any aggrieved person, organization or agency. Appeals shall be filed before the effective date of the Negative Declaration listed above. The Notice of Appeal shall be in writing and shall be filed with the appropriate fee at the San Bernardino County Government Center Public Information Counter during normal business hours.

for Sharon Hightower, Director of Planning

Signature and Title

Attachments:

Initial Study and any Mitigation Measure(s)

cc:

INTEROFFICE MEMO

DATE JANUARY 23, 1991

PHONE x4099

FROM

ANDREW RUSH, PLANNER ENVIRONMENTAL TEAM

TO

HONORABLE PLANNING COMMISSION



AGENDA DATE 1/24479fiSan Bernardino AGENDA ITEM # 3

SUBJECT CALIFORNIA PORTLAND CEMENT COMPANY; SAMR/89-0332/DN166-203N

As indicated in the staff report, the applicant has expressed concern over several of the Conditions of Approval required by the Department of Environmental Health Services. In response to these concerns, DEHS has met with the applicant and after consulting with planning staff, is recommending the following revisions to their conditions:

1. Condition No. 17 should be amended to read:

Toilet facilities shall be provided on site and readily accessible to employees. Portable toilets shall be maintained so as not to create a public nuisance.

2. Condition No. 33 should be amended to read:

An adequate supply of potable drinking water shall be provided at all active working sites. If bottled water is approved, applicant shall provide evidence of a contract with a bottled water supplier or other source approved by DEHS.

Condition No. 34 should be amended to read:

The applicant will be allowed to use portable toilets. Verification of a contract with a portable toilet supplier and a DEHS approved septic pumper must be submitted to DEHS.

4. Condition No. 35 should be revised to indicate the correct Regional Water Quality Control Board, which is:

Lahonton Region, 15428 Civic Drive, Suite 100 Victorville, CA 92392

- Condition No.'s 32, 44, 47 and 48 should be deleted.
- 6. The following conditions should be added as DEHS ongoing conditions for operation:

- A. A Special Use Permit from the Water/Wastewater Section of DEHS shall be required to monitor sanitary conditions (i.e. portable toilets) of the site. Contact the Water/Wastewater Section at (714) 387-4666.
- B. Any soil which becomes contaminated with hazardous waste or hazardous materials as a result of spills, etc., shall be removed and disposed of in accordance with the Health & Safety Code and DEHS requirements.
- C. If inhabitable structures (i.e. trailers, office buildings, etc.), permenent or temporary, are placed on the project site, applicant shall be required to sapply for a Temporary Use Permit and at that time a permanent sewage disposal system may be required.

Planning staff has revised the Initial Study completed for the project in May 1990. The revisions reflect the final mitigation measures determined appropriate for the project. The following revisions have been made to Section IV of the Initial Study regarding Mitigation Measures:

1. Mitigation Measure No. 1 was amended to read:

Upon final reclamation, the edges of all benches shall be blasted so that the resulting rubble may fall to its natural angle of repose thereby creating artificial talus slopes between the benches and highwalls. The bench ends shall be contour graded to match adjacent topography. The waste dump shall have finished slopes of two to one (2:1), horizontal to vertical, and be contour graded to blend with existing natural contours. Rip rap shall be placed at the base of those waste dump slopes adjacent to the drainage course.

Mitigation Measure No. 4 was amended to read:

Prior to any disturbance of the area in which the abandoned tortoise burrow is located, a biological monitor shall verify that the burrow has not been reoccupied. The biologist shall submit a report of the findings to the Planning Officer for review and approval.

Memo to Planning Commission January 23, 1991 Page 3

If any Desert Tortoises are located on site, the area will be avoided and the applicant shall immediately contact the California Department of Fish and Game and/or the U.S. Fish and Wildlife Service to remove the tortoise, or follow their instructions and regulations.

Attachments: 1



PLANNING DEPARTMENT Staff Report



HEARING DATE: 01/24/91 PROJECT DESCRIPTION	AGENDA ITEM NO:3
DATES ID :745DSN88004199SAMR02/04199SM2 COMMUNITY :ORO GRANDE FILE/INDX :SAMR/89-0332/DN166-203N APPLICANT :CALIFORNIA PORTLAND CEMENT CO :MINING/RECLAMATION PLAN TO RE- ESTABLISH A QUARTZITE OPERATION ON 48.21 ACRES LOCATION :APPROXIMATELY 2 MILES NORTHEAST OF INTERSECTION OF NATIONAL TRAILS HWY & MILL STREET REP('S) :RAINS, JOHN	National Trails Hwy Project IS Oro Grande Victorville
6 HEARING NOTICES SENT ON 01/11/91 P.C. FIELD INSPECTION DATE/BY:	
SITE DESCRIPTION PARCEL SIZE: 48.21 ACRES/DIMENS TERRAIN: Moderately to steeply sloping hillsid VEGETATION: Sparsely scattered desert scrub com	ions es.
EXISTING LAND USE: Inactive mine. GENERAL PLAN LAND USE DISTRICT: Regional Indus	
GENERAL PLAN LAND USE DISTRICT: Regional incus OVERLAY DISTRICT: None	CLICIT (III) IMPROVENENT LEVEL: 3
SURROUNDING LAND DESCRIPTION	

LAND USE/ GENERAL PLAN LAND USE DISTRICT/ IMPROVEMENT LEVEL/ OVERLAY DISTRICT Mining Operation / Regional Industrial / Improvement Level 4 NORTH:___ Radio Transmission Relay Towers / Regional Industrial / Improvement Level 4 SOUTH: Mining Operation / Regional Industrial / Improvement Level 4 EAST: Open Space / Regional Industrial / Improvement Level 4 WEST: AGENCY COMMENT None CITY SPHERE OF INFLUENCE/MAC/CAP:__ WATER SERVICE: Bottled Water SEPTIC/SEWER SERVICE: Septic System / Portable Toilets STAFF RECOMMENDATION: Approve project subject to Conditions of Approval.

California Portland Cement Company SAMR/89-0332/DN166-203N Page 2 of 6

BACKGROUND

The referenced Mining and Land Reclamation Plan is a request to reestablish a quartzite mining operation in the Superior Silica Mine. The mine is located approximately 2.5 miles northeast of Oro Grande, on the northwest slope of Quartzite Mountain just south of Oro Grande Canyon.

The applicant proposes to remove an estimated 5,000,000 tons of material from the mine. The material will be processed on site using portable equipment and stockpiled for shipment to California Portland Cement's Colton and Mojave cement plants. The mine will operate for nine (9) months out of the year (September through May), shutting down during the hot summer months (June through August). Shipments to the cement plants however, will continue throughout the year. Mining activities will occur over 44.21 acres of the 48.21 acre site.

The Superior Silica Mine was established in 1974 by California Portland Cement Company. Initial operations mined about 15,000 to 20,000 tons of quartzite which were stockpiled on site for later shipment. The quartzite material was loaded and hauled to the Colton cement plant on an intermittent basis through 1986 when activities at the mine finally ceased.

According to the applicant, an estimated 500,000 tons of limestone were inadvertently removed from the property by Southwestern Portland Cement Company some 50 years ago during their mining of the Summit Lode and Summit No. 2 claim which lie adjacent to the Superior Mine claims. During this operation, Southwestern also initiated the construction of an overburden waste dump which was later added to by California Portland Cement during its initial mining of the Superior Silica Mine.

ANALYSIS

Mining will be in the form of a hillside, multi-bench (top to bottom mining sequence) quarry using drill and blast techniques to obtain a maximum working slope of 1:1 (45) 20 feet vertical and 20 feet horizontal in the hardrock surface. The quartzite material will be run through an on site portable crushing and screening plant and stockpiled in quantities up to 25,000 tons. The material will be loaded onto trucks for hauling to cement plants located in Colton and Mojave. The mine is expected to produce 100,000 tons of quartzite material and up to 5,000 cubic

California Portland Cement Company SAMR/89-0332/DN166-203N Page 3 of 6

yards of overburden (i.e. rock, sand, silts and clays) per year for the life of the mining operation.

The overburden will be placed on an existing waste dump which is located on the northwest portion of the property. The dump was constructed over a natural drainage course. It appears that drainage flows generated by storm runoff are infiltrating the soil at the base of the waste dump. Due to the fact that the dump has been in existence for approximately 50 years and no sign of erosion or failure is evident, there does not appear to be a problem for its continued use as a waste area.

To mitigate potential impacts, staff has included a condition of approval to obtain a California Department of Fish and Game stream alteration permit (1603) if determined necessary by Fish and Game. The applicant is also required to ensure the stability of the overburden disposal area by placing rip rap along the base adjacent to the drainage course.

An additional environmental concern that the project may have is its potential impacts on the Desert Tortoise. The initial biological assessment completed for the property identified a possible tortoise burrow on the upper reaches of a steep slope on site. An intensive survey followed the initial assessment to determine if there were other indications of tortoise on site. No further tortoise sign was located. The biologist determined that the burrow had been abandoned for at least one year and concluded that the habitat was no longer being actively used. Staff has included as a condition of approval that, prior to any disturbance in the area the burrow is located, a biological monitor shall verify that the burrow has not been reoccupied.

The applicant has indicated that mineral reserves at the site will allow mining for at least the next 50 years, however staff is recommending that the project be approved for 20 years to allow the Reclamation Plan to be updated based on current procedures and reclamation techniques. The applicant has been advised of the County's policy regarding reclamation plan time frames and will be required to submit revised plans prior to the expiration of this permit.

The applicant has expressed concerns over Conditions of Approval No.'s 33, 34 and 47 which are all requirements of the Department of Environmental Health Services. Condition No. 33 requires that potable water be provided on site or hauled to the site for employee use. The applicant has indicated that employees will provide their own source of water (i.e. water from home), and

California Portland Cement Company SAMR/89-0332/DN166-203N Page 4 of 6

that requiring a well on site is unrealistic because the well would have to be drilled through solid bedrock over 100 feet deep with no guarantee that any water found would be potable. The applicant is willing to provide bottled water on one of the company vehicles if that will meet DEHS's requirement.

Condition of Approval No. 34 requires that a septic system be installed on site. The applicant feels that this is unwarranted for the type of operation proposed and the size of the work force (less than 10 employees) that will be working at the mine. The applicant has proposed portable toilets which will be serviced regularly and can be removed from the site when mining activities are shut down for the summer.

The applicant also has concerns over Condition No. 47 which requires fueling and truck wash areas be protected by impervious materials to isolate petroleum products from the underlying aquifer. The applicant plans on using a fuel truck to service the equipment on site so that there will not be a specific location in which fueling activities will occur. The applicant has indicated that during refueling, the tanker operator places a tub underneath the equipment to catch any spills that may occur. DEHS is currently working with the applicant to resolve these issues and may propose amendments to the conditions during the hearing.

Reclamation of the site will be in conjunction with mining to the extent possible. Reclamation activities will include contour grading the bench end peripheries to match adjacent topography, blasting the outside edges of the benches so that the resulting rubble may fall to its natural angle of repose thereby creating an artificial talus slope between the bench and highwall, ensuring final slopes of the waste dump do not exceed two to one (2:1) and contour grading them to match surrounding terrain, distributing stockpiled overburden over the quarry benches and implementing and monitoring a revegetation program, and removing any structures and their foundations and scarifying all areas that have been compacted by roads and operations.

To ensure that reclamation of the site is completed, the applicant shall provide an acceptable form of financial assurance. The financial assurance will name both the County and the State Geologist as payees per the requirements of AB 3551. The amount will be based on an estimate of reclamation cost provided by the applicant and subject to a review by both County staff and the State Geologist. Post-reclamation monitoring to confirm site stability shall also be required of the applicant.

California Portland Cement Company SAMR/89-0332/DN166-203N Page 5 of 6

This Mining and Land Reclamation Plan, as submitted by California Portland Cement Company for the Superior Silica Mine, meets the requirements set forth in the Surface Mining and Reclamation Act (SMARA) as determined by a review by the Department of Conservation, Division of Mines and Geology and this office.

The Land Use and Mineral Resource sections of the General Plan and the Development Code were also reviewed in relation to this application. It was determined that the proposed Mining and Land Reclamation Plan is consistent with County goals, policies and The project will not have a significant effect on procedures. the environment, subject to implementation of prescribed mitigation measures, and a Negative Declaration is recommended. A Mitigation Monitoring and Compliance Program has been prepared pursuant to Only those mitigation measures required as on-going AB 3180. conditions have been included in the formal monitoring and compliance program. All other mitigation measures are self monitoring through subsequent permitting processes and therefore are not included in the formal monitoring and compliance program.

FINDINGS: Mining Conditional Use Permit and Reclamation Plan

- 1) The site for the proposed use is adequate in size and shape to accommodate the proposed use and all yards, open spaces, setbacks, walls and fences, parking areas, loading areas, landscaping, and other features pertaining to the application, because the project is designed to be completely accommodated within the 48.21 acre site.
- The site for the proposed use has adequate access, meaning that the site design incorporates street and highway limitations, because direct access will be from National Trails Highway onto an established access/haul road that serves several other mining operations. Access to and from National Trails Highway will be Riverside Cement's plant entrance which already provides the necessary road improvements for merging trucks.
- on abutting property or the permitted use thereof, meaning that the use will not generate excessive noise, vibration, traffic or other disturbance, because the project is located in a remote area that is zoned for industrial uses and the site is surrounded by open space and other mining operations that use the same access/haul road.

California Portland Cement Company SAMR/89-0332/DN166-203N Page 6 of 6

- 4) The proposed use is consistent with the goals, policies, standards and maps of the General Plan, because the proposed use is consistent with the Regional Industrial (IR) Land Use District and all required infrastructure either exists or will be provided for an Improvement Level 4 Overlay District.
- The lawful conditions stated in the approval are deemed necessary to protect the public health, safety and general welfare, because they ensure compliance with the requirements of County Departments with regard to access, circulation, fire protection and compatibility with surrounding land uses.
- 6) The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities, because there are no obstructions to solar energy reaching the site and there is sufficient space available to add these features.
- 7) The proposed use will not have a significant adverse impact on the environment.
- 8) The Reclamation Plan complies with the California Surface Mining and Reclamation Act of 1975 (SMARA) and the San Bernardino County Development Code, Title 8, Division 10, Chapter 1.

RECOMMENDATION

SAMR/89-0332/DN166-203N and Reclamation Plan 91M-01.

The Planning Commission APPROVE the Mining and Land Reclamation Plan to reestablish a quartzite mining operation with accessory uses at the Superior Silica Mine which is located approximately 2.5 miles northeast of Oro Grande, on the northwest slope of Quartzite Mountain subject to the attached Conditions of Approval; ADOPT the Findings; ADOPT a Negative Declaration; ADOPT the Mitigation Monitoring Plan and FILE a Notice of Determination.

Attachments: Graphics; Conditions of Approval; Initial Study; Mitigation Monitoring and Compliance Plan; and Mine Reclamation Operating Plan Outline.

				•
		•		
·				
	·			
			·	
				٠

MINING/RECLAMATION

GENERAL ON-GOING CONDITIONS

- 1. This conditional approval is for the establishment of Mining/Reclamation Plan No. 91M-01; a Mining Conditional Use Permit and Reclamation Plan to reestablish a quartzite mining operation on 48.21 acres in the Superior Silica Mine located approximately 2.5 miles northeast of Oro Grande, on the northwest slope of Quartzite Mountain. A copy of the Reclamation Plan shall be kept on site during operations. A Mitigation Monitoring and Compliance Program has also been included as part of the Reclamation Plan approval.
- 2. The Reclamation Plan shall be effective for a period of 20 years, expiring on January 31, 2011. The Conditional Use Permit shall be in effect as long as the Reclamation Plan is valid and the operation is in compliance with the Reclamation Plan and Conditions of Approval.
- 3. The San Bernardino County Planning Officer shall be notified in writing, within 30 days, about any:
 - A) Change in operating procedures, or inactive periods of operation for one (1) year or more.
 - B) Changes of Company ownership, address, or telephone during the life of the Conditional Use Permit or Reclamation Plan.
 - C) Any changes to provisions in lease agreements or real property that will affect the approved Mining/Reclamation Plan.
- 4. A report summarizing the past year's mining and reclamation activity shall be filed with the State Geologist and the Planning Officer each year beginning on July 1, 1991 and thereafter on an anniversary date to be determined by the State Geologist. Mine site inspections will occur in conjunction with yearly updates or at other times as appropriate.
- *5. As determined necessary on a case-by-case basis, the applicant shall deposit funds with the County, necessary to compensate staff time and expenses for review of monitoring reports and possible field checks.

^{*}NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

- 6. If the operation or Reclamation Plan procedures change from those outlined in the Final Mining/Reclamation Plan No. 91M-01, an amendment shall be filed and approved within 90 days before such changes are made effective.
- 7. The mining operation shall be conducted in a uniform manner, with exterior slopes and floors trimmed as the mining operation proceeds. Excavation shall be conducted so as to leave them in a reasonably neat and trim manner. Final pits shall be excavated and trimmed as per the approved Mining/Reclamation Plot Plans.
- The permittee shall maintain the Mine, Plant site and premises in a neat and orderly manner at all times. No refuse shall be maintained at any time in pit excavation, channel ditches or work areas. All rubbish shall be disposed of away from the work area. When, in the opinion of the County, storm or other waters in the excavation shall be considered a nuisance, the permittee shall be required to abate said nuisance.
- 9. At the time of termination of this operation for any reason, all equipment, buildings, structures and refuse shall be removed from the site, all hazards mitigated, and reclamation initiated within 90 days, as per the approved Mining/Reclamation Plan.
 - 10. If an area is to be used for <u>temporary</u> water storage or silt basin, the area shall be completely enclosed with a six foot (6') high chain link fence in accordance with the State of California Department of Transportation standard specifications and standard plan F-10, and provide a lockable gate at the location of access. Gates shall be kept locked at times when not in use.
 - 11. No excavation or deposit of materials shall be made in such a way as to place basins in a category falling under the cognisance of the State Division of Dams. Material stockpiles shall be aligned to allow adequate continuous openings between stockpiles allowing uninterrupted passage of flows.

- **12. Upon final reclamation, the edges of all benches shall be blasted so that the resulting rubble may fall to its natural angle of repose thereby creating artificial talus slopes between the benches and highwalls. The bench ends shall be contour graded to match adjacent topography. The waste dump shall have finished slopes of two to one (2:1), horizontal to vertical, and be contour graded to blend with existing natural contours. Rip rap shall be placed at the base of those waste dump slopes adjacent to the drainage course.
- **13. The applicant shall place topsoil and vegetation that is removed from mined areas on areas that are being reclaimed. This shall help provide a productive soil layer and provide some native seed stock. Revegetation shall be supplemented with native and locally adapted seed broadcasting and the planting of established seedlings and shrubs, as per the approved Mining/Reclamation Plan.
- **14. One (1) year after Reclamation has started, the reclaimed areas shall be examined to determine if reclamation and revegetation efforts as proposed are successful. This examination of reclamation and revegetation efforts shall be reviewed through the Mitigation Monitoring Program and approved by the Planning Officer. If deemed successful, this program will be continued for the entire life of the project. If not successful, the Applicant shall diligently explore for an acceptable alternative means of reclaiming the site. All Alternatives shall be reviewed and approved by the County prior to their implementation and shall be monitored by the applicant and the County to ensure success.
- **15. The applicant shall retain professionals, approved by San Bernardino County to monitor the performance of required mitigation measures with regular field inspections and plan reviews. Monitoring shall be done on an annual basis for the duration of the project and through completion of the reclamation plan. The monitoring schedule shall clearly identify when and how mitigation and monitoring shall be completed on a phase-by-phase basis to ensure all mitigation measures identified in the Conditional Use Permit and Reclamation Plan are adequately implemented and completed.

The applicant shall install Company identification signs on *16. all company operated (including trucks rented or leased by the applicant) haulage trucks used on public roads. The signs shall be located on both sides and the rear of each truck. The information contained on the sign shall include:

On the rear of the truck:

On the side of the truck:

- a. How am I driving?
- a. Company name.

Truck number. b.

- b. Truck number.
- c. Company phone number.
- Company phone number. c.

The signing shall be printed in a minimum of 3" high lettering. The applicant shall have a person or an answering machine available during operating hours to answer the phone that corresponds to the phone number on the truck. persons answering the phone number shall be instructed as to how to take the calls, how to affect a solution, and be responsible for returning a call to the complainant with results of investigation. The applicant shall keep a log of all calls received and shall include documentation of response and/or resolution of complaints. The log shall be made available to the County upon request.

DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES

- Toilet facilities shall be provided on site and readily 17. accessible to employees. Portable toilets shall be maintained Revised by so as not to create a public nuisance. The-septic-system PC 1/24/91 shall-be-maintained so as not-to-create a-public-nuisance-and shall-be-serviced-by-a-DEHS-permitted-pumper.
 - All on site ponding water shall be maintained so as to avoid 18. vector breeding, i.e., mosquitoes, midges, and gnats.
- A Special Use Permit from the Water/Wastewater Section of 19. DEHS shall be required to monitor sanitary conditions (i.e. Added by portable toilets) of the site. Contact the Water/Wastewater PC 1/24/91 Section at (714) 387-4666.
- Any soil which becomes contaminated with hazardous waste or 20. hazardous materials as a result of spills, etc., shall be removed and disposed of in accordance with the Health and PC 1/24/91 Safety Code and DEHS requirements.

*NON-STANDARD CONDITIONS **ENVIRONMENTAL MITIGATION MEASURE

Added by

Added by PC 1/24/91 If habitable structures (i.e. trailers, office buildings, etc.), permanent or temporary, are placed on the project site, applicant shall be required to apply for a Temporary Use Permit and at that time a permanent sewage disposal system may be required.

PLANNING DEPARTMENT

- 22. Any advertising or identifying sign shall be constructed in compliance with the designated Official Land Use District for this site.
- 23. All trash storage shall be maintained in closed containers and shall be kept in an enclosure providing screening from public view.
- 24. This Conditional Use Permit shall become null and void:
 - A) Unless occupancy or use of the land or existing structures authorized by such Conditional Use Permit has taken place within thirty-six (36) months after the approval of said Conditional Use Permit.
 - B) Where circumstances beyond the control of the applicant cause delays which do not permit compliance within the time limitation established in this section, the Planning Officer may grant an extension of time for a period not to exceed an additional thirty-six (36) months. Applications for such extension of time must be set forth in writing, stating the reasons for this extension and shall be filed together with a fee as established by the Board of Supervisors, with the Planning Department, thirty (30) days before the expiration of the Conditional Use Permit. The applicant will be responsible for initiating any extension request.
- 25. The applicant shall ascertain and comply with requirements of all Federal, State, County, and Local agencies as are applicable to the project areas. They include, but are not limited to: the San Bernardino County Departments of Planning, Environmental Health Services, Transportation/Flood Control, Fire Warden, Building and Safety, Air Pollution Control District (SBC-APCD), State Fire Marshall, Lahontan Regional Water Quality Control Board, CalTrans District 8, California Department of Fish and Game, Division of Mines and Geology, U.S. Fish and Wildlife Service, Mine Safety and

^{*}NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

Health Administration (MSHA), the California Occupational Safety and Health Administration (Cal-OSHA), and California Highway Patrol.

- 26. All blasting activities shall abide by OSHA, MSHA and the U.S. Bureau of Mines standards and ordinances and be conducted by a contractor with an Explosives Permit obtained from the Sheriff's Department.
- 27. In compliance with San Bernardino County Ordinance #2684, the applicant shall agree to defend, at his sole expense, any action brought against the County, its agents, officers, or employees, because of the issuance of such approval, or in the alternative, to relinquish such approval. The applicant shall reimburse the County, its agents, officers, or employers, for any Court costs and attorney's fees which the County, its agents, officers or employees shall be required by a court to pay as a result of such action. The County may, at its sole discretion, participate at its own expense in the defense of any such action but such participation shall not relieve applicant of his obligations under this condition.
- 28. In the event that project-related excavation uncovers a buried paleontological or archaeological deposit, work in the area will be halted and at the expense of the applicant, a qualified paleontologist or archaeologist will be contacted to evaluate the significance of the find and make recommendations as to its disposition. The applicant shall complete and fund all mitigation measures deemed necessary.
- **29. The applicant shall provide San Bernardino County with a cash or surety bond or other acceptable form of financial assurance for the operating performance, reclamation plan and mitigation measures. The bond shall be available to both the County and the State Geologist at their discretion. Any withdrawals made by the County or State Geologist for violations or reclamation shall be redeposited by the applicant within 30 days of notification.

The bond amount shall be calculated based on a cost estimate submitted by the applicant and approved by both County staff and the State Geologist for the approved reclamation procedures. The bond shall be established and in place prior to the use or occupancy of the site. Each year, following the annual mine site inspection, the bond amount shall be adjusted to account for new lands disturbed by surface

^{*}NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

mining operations, inflation, and reclamation of lands accomplished in accordance with the approved reclamation plan.

The security bond is not set up to replace the applicant's responsibility for reclamation or mitigation, but to assure funding for the Operating Performance, Reclamation Plan and mitigation measures. Should the applicant fail to perform or operate within all of the requirements of the approved reclamation plan, the County or State Geologist will follow the procedures outlined in Sections 2773.1 and 2774.1 of the Surface Mining and Reclamation Act (SMARA), regarding the encashment of the bond and applicable administrative penalties, to bring the applicant into compliance. The requirements for the bond will terminate when the approved project, mitigation measures and final Reclamation Plan have been completed.

- 30. Any lighting provided to illuminate the site shall be arranged to reflect away from adjoining properties, streets and highways.
- 31. The applicant shall apply biodegradable dust-binding agents such as "Wesling 120" on the project's roadways or wet sweep all access roads and operating areas as needed to reduce fugitive dust emissions.
- 32. The applicant shall remove to a County approved disposal site, any soils that become chemically contaminated so as to preclude any chemical leaching into the local ground water supply over time.
- 33. Pursuant to California State Assembly Bill 3158, applicant shall pay a fee of \$1,250 (one thousand two hundred fifty dollars) to Department of Fish and Game. The fee shall be submitted to the Clerk of the Board of Supervisors upon filing of the Notice of Determination along with any filing fee required by the Clerk. The applicant should be aware that Section 21089(b) of the Public Resources Code provides that any project approved under CEQA is not operative, vested or final until the required fee is paid.
- 34. These conditions of approval are continuing conditions. Failure of the applicant and/or operator to comply with any or all of said conditions at any time shall result in the revocation of the permit granted to use the property.

^{*}NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

PRIOR TO THE INSTALLATION OF PROCESSING EQUIPMENT OR ISSUANCE OF ANY PERMITS FROM THE DEPARTMENT OF BUILDING AND SAFETY, THE FOLLOWING CONDITIONS SHALL BE MET:

DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES

- Deleted by PC 1/24/91

 Abandoned-wells-shall-be-identified-and-destroyed-under permit-from-DEHS.
- An adequate supply of potable drinking water shall be provided at all active working sites. If bottled water is approved, applicant shall provide evidence of a contract with a bottled water supplier or other source approved by DEHS. Potable water shall be provided-for-employee use either on-site-or-hauled-to-site.—Submit-verification-of-source.
- The applicant will be allowed to use portable toilets.

 Verification of a contract with a portable toilet supplier and a DEHS approved septic pumper must be submitted to DEHS.

 Ff-sewer-connection-and-service-are-unavailable,-septic systems-will-then-be allowed, under the following-conditions:
 - a. Soil-testing-for-the-subsurface-disposal-system-shall meet-the-requirements of the Department-of-Environmental Health-Services--(DEHS).----Submit--soils--report--and appropriate--fee--to--DEHS--for--review--and--approval-Submit--copy--of--cover--sheet--with--approval--stamp--to Building--&--Safety--at--time--of--plot--plan--approval-Approved-perc-report--shall--be-submitted-to--Building--&--Safety-at--time--of--plan--check:
 - **38. Obtain written clearance or a wastewater discharge permit from the designated California Regional Water Quality Control Board (listed below) and forward a copy to the Department of Environmental Health Services.

Revised by PC 1/24/91

Lahonton Region, 15428 Civic Drive, Suite 100 Victorville, CA 92392

Colorado-River-Basin-Region,-73271-Highway-111, Palm-Desert,-CA-92260-

39. A "Risk Management and Prevention Program" may be required DEHS Risk Management/Community Right-to-Know. For more information call (714)387-3044.

*NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

40. Verification of application for sign registration and plot plan approval by DEHS must be submitted prior to the issuance of a building permit for the installation, wiring, remodeling or reconstruction of any freestanding sign or portion thereof which requires a building permit.

FORESTRY AND FIRE WARDEN DEPARTMENT

- 41. The above referenced project is protected by the San Bernardino County Forestry and Fire Warden Department. Prior to construction occurring on any parcel, the owner shall contact the Fire Department for verification of current fire protection requirements.
- 42. All new construction shall comply with the existing Uniform Fire Code Requirements and all applicable statutes, codes, ordinances, or standards of the Fire Department.
- 43. Prior to any construction occurring, all flammable vegetation shall be removed from each building site a minimum distance of thirty (30) feet from any flammable building material, including a finished structure.

PLANNING DEPARTMENT

- 44. The developer shall provide certification from the appropriate school district as required by California Government Code Section 53090(b) that any fee, charge, dedication or other form or requirement levied by the governing board of the district pursuant to Government Code Section 53080(a) has been satisfied.
- 45. Submit a detailed plot plan of the plant operation site for review and approval. The plot plan shall reflect:
 - A. Indicate height, dimension, square footage and number of stories, including basements, of all existing and proposed structures, including but not limited to power poles, fences, trash enclosures, tower, etc.
 - B. Applicant shall provide one (1) parking space for each employee on the largest shift and one (1) parking space for each vehicle operated or kept in connection with the use. Show parking areas in detail to include:

^{*}NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

- 1. Each regular parking space shall be a minimum of 9' x 19'.
- Each compact car parking space shall be a minimum of 7 1/2' x 15'. Compact car spaces may be used for up to 25% of the required spaces.
- 3. One handicapped parking space, located as near to main entrance as practicable, a minimum of 14' x 19' is required for each 40 parking spaces, or as required by State Building Code.
- 4. One loading zone, a minimum of 10' x 20', is required for each commercial, industrial, or institutional use. One loading zone per 5,000 square feet of building floor area, maximum of 4 spaces per use.
- 5. Show dimension, type of parking spaces, aisle/driveway widths and directional arrows indicating the flow of traffic.
- 6. Indicate the existing and proposed type of surfacing for parking area and aisle/driveways.
- 46. Applicant shall submit the approved plot plans (brownline or original) to the Office of Building and Safety for a Land Use Compliance Review.

PRIOR TO OCCUPANCY OR USE OF THE SUBJECT PROPERTY, THE FOLLOWING CONDITIONS SHALL BE MET

DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES

- Plans-for-underground-tanks-shall-be-reviewed and approved

 Deleted by by-DEHS.---for-information-call-DEHS/Hazardous-Materials

 PC 1/24/91 Field-Services-at-714/387-3080.
 - 48. Applicant shall be required to submit to DEHS a "Business Plan" as defined in Chapter 6.95 of the Health and Safety Code, detailing the plan for emergency release or threatened release of hazardous materials and wastes. Obtain clearance from DEHS/Hazardous Materials Section. For information, call Risk Management/Community Right-to-Know at (714)387-3044.

*NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

- 49. A Hazardous Materials Handler Permit and/or Hazardous Waste Generator Permit shall be required. For information, call Hazardous Materials Field Services at 714/387-3080.
- Fueling-areas-and-truck-wash-areas-shall-be-protected-by impervious-materials-(e.g.,-asphalt,-or-sealed-concrete)-and shall-have-adequate-catch-drains-to-isolate-petroleum products-from the underlying aquifer.-The-design of the-catch basins/interceptors/separators-shall-be-submitted-to-the Department-of-Building-and-Safety-and-Department-of Environmental-Health-Services-(DEHS)-for-evaluation-and approval:
- 51. An-RMPP-(Risk-Management-and-Prevention-Program)-may-be required-to-be-submitted-to-BEHS-if-extremely-hazardous Materials-are-to-be-handled-at-the-facility.--The-applicant shall-provide-all-documentation-requested-by-DEHS-to-make this-determination.

FORESTRY AND FIRE WARDEN DEPARTMENT

- feet in length shall be approved by the Fire Department having jurisdiction, and shall be extended to within one-hundred and fifty (150) feet of, and shall give reasonable access to all portions of the exterior walls of the first story of any building. An access road shall be provided within fifty (50) feet of all buildings if the natural grade between the access road and building is in excess of thirty percent (30%). Where the access roadway cannot be provided, approved fire protection system or systems shall be provided as required and approved by the Fire Department.
- 53. A turnaround shall be provided at the end of each roadway, one-hundred fifty (150) feet or more in length and shall be approved by the Fire Department. Cul-de-sac length shall not exceed six-hundred (600) feet except as identified in the Development Code and approved by The Chief.
- *54. Any gated access shall be approved by the Fire Department and emergency access arrangements made prior to occupancy.
- *55. All flammable liquid storage and dispensing shall be in compliance with the applicable sections of the Uniform Fire Code Article 79. Plan review and permit to operate are required.

*NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

- *56. All access roadways shall be in accordance with County Ordinance #3381.
- *57. Access road to mining site shall have a minimum width of 26 feet and shall not exceed a grade of 12 percent.

SAN BERNARDINO COUNTY AIR POLLUTION CONTROL DISTRICT

**58. The applicant shall apply to SBCAPDC and obtain any required permits for the installation and operation of equipment used on site.

PLANNING DEPARTMENT

- 59. The applicant shall install or have available a truck wash and load spray water system at the terminus of the property access road. All loaded trucks leaving the site shall have their sides and tires washed to reduce fugitive dust, excess sand and gravel and soil transport onto public streets.
- 60. The applicant shall obtain a California Department of Fish and Game (1601-1607) stream alteration permit for the natural drainage course on site or provide evidence that a permit is not necessary.
- 61. Adequate provisions shall be made to intercept and conduct the off-site tributary drainage flow around or through the site in a manner which will not adversely affect adjacent or downstream properties.
- 62. Applicant shall submit an addendum to the Mine Reclamation Operating Plan Outline and/or plot plan addressing the following issues:
 - A. Projected total volume of material to be mined from the site.
 - B. Estimated capacity and ability of existing waste dump to accommodate mining overburden.
 - C. Any temporary overburden storage areas to be established as interim measures prior to reclamation of upper benches shall be identified. Submit an erosion control plan to stabilize temporary overburden storage.

**63. The County is in the process of developing and implementing development impact and Mining Environmental Mitigation fees for various infrastructure and capital facility development. These fees will provide for various capital facilities including, but not limited to, roads, libraries, museums, parks (local and regional), open space, flood control, drainage, water, sewer, courts, jails, other law enforcement facilities, fire fighting facilities and equipment and geographic mapping database development. This project shall be subject to all such development impact fees which are in effect prior to the issuance of final development permits (i.e., occupancy permit).

TO BE COMPLETED PRIOR TO OR DURING THE OPERATION AS DEFINED BY THE MITIGATION. ALL BIOLOGICAL CONDITIONS REQUIRE MONITORING AND REPORTING ACTIVITIES. THE APPLICANT IS RESPONSIBLE FOR FUNDING ALL MITIGATION.

BIOLOGICAL RESOURCES

- **64. Prior to any disturbance of the area in which the abandoned tortoise burrow is located, a biological monitor shall verify that the burrow has not been reoccupied. The biologist shall submit a report of the findings to the Planning Officer for review and approval. If any Desert Tortoises are located on site, the area will be avoided and the applicant shall immediately contact the California Department of Fish and Game and/or the U.S. Fish and Wildlife Service to remove the tortoise, or follow their instructions and regulations.
- **65. Within one year, the applicant, through a County approved Biologist, shall submit to the County a seed collection study to determine the presence, abundance and collectability of seeds in the project area. A seed collection transplanting/topsoil conservation plan shall then be developed by the Botanist to salvage propagules and important seed resources.
- **66. Within one year, the applicant, through a County approved Biologist, shall submit a detailed revegetation/habitat restoration plan for the Reclamation of the pit area. The analysis shall include a plan for the re-establishment of vegetation in all the disturbed areas; detailing the plant material including all seedling and planting mixtures, sources, amount required and method of application; the plan shall provide for sufficient lead to collect and salvage

^{*}NON-STANDARD CONDITIONS

^{**}ENVIRONMENTAL MITIGATION MEASURE

> plant propagules from on or near the site. Specifications in the analysis shall be provided on the use of any seedlings including planting method, size and grazing protection measures, weed control and finally the type, grade and application rate of fertilizers, shall be specified.

- **67. Within one year the applicant, through a County approved Biologist, shall submit a detailed monitoring/maintenance plan to monitor the success of the revegetation program and repair methods for eroded sites or areas requiring reseeding/replanting. The plan shall develop the goals of the revegetation program and detailed procedures to document that these goals have been achieved. Monitoring shall be conducted for at least five years after planting in each area of the project site.
- **68. The applicant shall have the revegetation, landscaping and monitoring plans prepared by a County approved Biologist, knowledgeable in the local flora. These plans shall insure that exotic plant species are not used and that a weed abatement program is part of the revegetation plan. The plan shall incorporate methods to examine the revegetation procedures and species mixtures and to monitor those procedures to insure that they meet the intent of the mitigation measures.

^{*}NON-STANDARD CONDITIONS
**ENVIRONMENTAL MITIGATION MEASURE

CALIFORNIA PORTLAND CEMENT COMPANY SUPERIOR SILICA MINE SAMR/89-0332/DN166-203N

MITIGATION MONITORING AND COMPLIANCE PROGRAM

This mitigation monitoring and compliance program has been prepared for use in implementing certain conditions of approval for SAMR/89-0332/DN166-203N; a quartzite mining operation in the Superior Silica Mine located approximately 2.5 miles northeast of Oro Grande on the northwest slope of Quartzite Mountain just south of Oro Grande Canyon. The program has been prepared in compliance with State law and the conditions of approval applied to the project by San Bernardino County. Only on-going mitigation measures are included in this program. All other mitigation measures are self-monitoring.

Assembly Bill 3180, effective January 1, 1989, requires adoption of a reporting or monitoring program for those conditions of approval placed on a project to mitigate or avoid adverse effects on the environment. The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation.

The monitoring program contains the following elements:

- 1) The conditions of approval that act as impact mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several conditions of approval, such as grading plan review and erosion control plan review.
- 2) A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.
- 3) The program contains a separate Mitigation Monitoring and Compliance Record for each action. On each of these record sheets, the pertinent actions and dates will be logged, and copies of permits, correspondence or other relevant data will be attached. Copies of the records will be submitted to the Office of Planning.
- 4) The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the program. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program.

CONDITION

**12. Upon final reclamation, the edges of all benches shall be blasted so that the resulting rubble may fall to its natural angle of repose thereby creating artificial talus slopes between the benches and highwalls. The bench ends shall be contour graded to match adjacent topography. The waste dump shall have finished slopes of two to one (2:1), horizontal to vertical, and be contour graded to blend with existing natural contours. Rip rap shall be placed at the base of those waste dump slopes adjacent to the drainage course.

IMPLEMENTATION AND VERIFICATION

Mine site shall be subject to annual field inspections by staff or other County representative to ensure compliance with the approved Reclamation Plan.

COMPLIANCE RECORD

WHEN REQUIRED: This is a general on-going condition of reclamation.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE:

CHECK NO.

APPROVED BY:

CONDITION

**13. The applicant shall place topsoil and vegetation that is removed from mined areas on areas that are being reclaimed. This shall help provide a productive soil layer and provide some native seed stock. Revegetation shall be supplemented with native and locally adapted seed broadcasting and the planting of established seedlings and shrubs, as per the approved Mining/Reclamation Plan.

IMPLEMENTATION AND VERIFICATION

Mine site shall be subject to annual field inspections by staff or other County representative to ensure compliance with the approved Reclamation Plan.

COMPLIANCE RECORD

WHEN REQUIRED: This is a general on-going condition of reclamation.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE:

CHECK NO.

APPROVED BY:

CONDITION

**14. One (1) year after Reclamation has started, the reclaimed areas shall be examined to determine if reclamation and revegetation efforts as proposed are successful. This examination of reclamation and revegetation efforts shall be reviewed through the Mitigation Monitoring Program and approved by the Planning Officer. If deemed successful, this program will be continued for the entire life of the project. If not successful, the Applicant shall diligently explore for an acceptable alternative means of reclaiming the site. All alternatives shall be reviewed and approved by the County prior to their implementation and shall be monitored by the applicant and the County to ensure success.

IMPLEMENTATION AND VERIFICATION

Applicant shall include a review and analysis of any revegetation efforts and their success in the annual report. Mine site shall be subject to annual field inspections by staff or other County representative to ensure compliance with the approved Reclamation Plan.

COMPLIANCE RECORD

WHEN REQUIRED: This is a general on-going condition of reclamation, but should occur within one (1) year after reclamation of the site has begun and thereafter as determined necessary by the Planning Director.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE:

CHECK NO.

APPROVED BY:

CONDITION

**15. The applicant shall retain professionals, approved by San Bernardino County to monitor the performance of required mitigation measures with regular field inspections and plan reviews. Monitoring shall be done on an annual basis for the duration of the project and through completion of the reclamation plan. The monitoring schedule shall clearly identify when and how mitigation and monitoring shall be completed on a phase-by-phase basis to ensure all mitigation measures identified in the Conditional Use Permit and Reclamation Plan are adequately implemented and completed.

IMPLEMENTATION AND VERIFICATION

A report summarizing the previous year's mining and reclamation activity shall be filed with the State Geologist and the Planning Officer each year beginning on July 1, 1991, and thereafter on an anniversary date to be determined by the State Geologist. Mine site inspections will occur in conjunction with yearly updates or at other times as appropriate.

COMPLIANCE RECORD

WHEN REQUIRED: This is a general on-going condition of Reclamation to begin on July 1, 1991, and then on an annual basis thereafter.

CHECK NO.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

APPROVED BY:

FEE:

CONDITION

**29. The applicant shall provide San Bernardino County with a cash or surety bond or other acceptable form of financial assurance for the operating performance, reclamation plan and mitigation measures. The bond shall be available to both the County and the State Geologist at their discretion. Any withdrawals made by the County or State Geologist for violations or reclamation shall be redeposited by the applicant within 30 days of notification.

The bond amount shall be calculated based on a cost estimate submitted by the applicant and approved by both County staff and the State Geologist for the approved reclamation procedures. The bond shall be established and in place prior to the use or occupancy of the site. Each year, following the annual mine site inspection, the bond amount shall be adjusted to account for new lands disturbed by surface mining operations, inflation, and reclamation of lands accomplished in accordance with the approved reclamation plan.

The security bond is not set up to replace the applicant's responsibility for reclamation or mitigation, but to assure funding for the Operating Performance, Reclamation Plan and mitigation measures. Should the applicant fail to perform or operate within all of the requirements of the approved reclamation plan, the County or State Geologist will follow the procedures outlined in Sections 2773.1 and 2774.1 of the Surface Mining and Reclamation Act (SMARA), regarding the encashment of the bond and applicable administrative penalties, to bring the applicant into compliance. The requirements for the bond will terminate when the approved project, mitigation measures and final Reclamation Plan have been completed.

IMPLEMENTATION AND VERIFICATION

The financial assurance shall name both the County and the State Geologist as payees per the requirements of AB 3551. The amount will be based on an estimate of reclamation cost provided by the applicant and subject to review by both County staff and Counsel and the State Geologist. The financial assurance will be reviewed on an annual basis for adequacy and shall be released when the approved project, mitigation measures and final reclamation plan activities have been completed.

COMPI	· T 7 1	7/17	$\mathbf{D} \mathbf{D} \mathbf{C}$	\sim
CHIMIPI	. 1 A P	UE H.	R F.L	

WHEN REQUIRED: Prior to use or occupancy of the site.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE: CHECK NO.

APPROVED BY: DATE APPROVED:

CONDITION

**64. Prior to any disturbance of the area in which the abandoned tortoise burrow is located, a biological monitor shall verify that the burrow has not been reoccupied. The biologist shall submit a report of the findings to the Planning Officer for review and approval. If any Desert Tortoises are located on site, the area will be avoided and the applicant shall immediately contact the California Department of Fish and Game and/or the U.S. Fish and Wildlife Service to remove the tortoise, or follow their instructions and regulations.

IMPLEMENTATION AND VERIFICATION

A report prepared by the biologist summarizing the findings of the monitoring activity and the steps taken if the burrow was found to be reoccupied shall be submitted to the Planning Director for review and approval.

COMPLIANCE RECORD

WHEN REQUIRED: This is a general on-going condition of operation, but should occur prior to any disturbance of the area in which the abandoned tortoise burrow is located.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE:

CHECK NO.

APPROVED BY:

CONDITION

**65. Within one year, the applicant, through a County approved Biologist, shall submit to the County a seed collection study to determine the presence, abundance and collectability of seeds in the project area. A seed collection transplanting/topsoil conservation plan shall then be developed by the Botanist to salvage propagules and important seed resources.

IMPLEMENTATION AND VERIFICATION

The study shall be submitted to the Planning Officer for review and approval.

COMPLIANCE RECORD

WHEN REQUIRED: Within one year of project approval.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE:

CHECK NO.

APPROVED BY:

CONDITION

**66.

Within one year, the applicant, through a County approved Biologist, shall submit a detailed revegetation/habitat restoration plan for the Reclamation of the pit area. The analysis shall include a plan for the reestablishment of vegetation in all the disturbed areas; detailing the plant material including all seedling and planting mixtures, sources, amount required and method of application; the plan shall provide for sufficient lead to collect and salvage plant propagules from on or near the site. Specifications in the analysis shall be provided on the use of any seedlings including planting method, size and grazing protection measures, weed control and finally the type, grade and application rate of fertilizers, shall be specified.

IMPLEMENTATION AND VERIFICATION

The plan shall be submitted to the Planning Director for review and approval.

COMPLIANCE RECORD

WHEN REQUIRED: Within one year of project approval.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE:

CHECK NO.

APPROVED BY:

CONDITION

**67. Within one year the applicant, through a County approved Biologist, shall submit a detailed monitoring/maintenance plan to monitor the success of the revegetation program and repair methods for eroded sites or areas requiring reseeding/replanting. The plan shall develop the goals of the revegetation program and detailed procedures to document that these goals have been achieved. Monitoring shall be conducted for at least five years after planting in each area of the project site.

IMPLEMENTATION AND VERIFICATION

The plan shall be submitted to the Planning Director for review and approval.

COMPLIANCE RECORD

WHEN REQUIRED: Within one year of project approval.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE:

CHECK NO.

APPROVED BY:

CONDITION

**68. The applicant shall have the revegetation, landscaping and monitoring plans prepared by a County approved Biologist, knowledgeable in the local flora. These plans shall insure that exotic plant species are not used and that a weed abatement program is part of the revegetation plan. The plan shall incorporate methods to examine the revegetation procedures and species mixtures and to monitor those procedures to insure that they meet the intent of the mitigation measures.

IMPLEMENTATION AND VERIFICATION

Applicant will designate a qualified biologist to compile the plans and studies required in the conditions of approval.

Within one (1) month after receiving approval, applicant will provide to the Planning Officer for review and approval the name, qualifications, address, and telephone number of the designated biologist. If there is to be a change of biologist, applicant will notify the Planning Officer within 30 days and provide the name, qualifications, address and telephone number of the proposed replacement.

COMPLIANCE RECORD

WHEN REQUIRED: Within one month of project approval and thereafter within 30 days of any change as indicated above.

DATE COMPLETED:

SUBMITTED TO COUNTY BY:

FEE: CHECK NO.

APPROVED BY:

ENVIRONMENTAL PUBLIC WORKS AGENCY LAND MANAGEMENT DEPARTMENT OFFICE OF PLANNING

MINING/RECLAMATION SUMMARY FORM

			I	Date
Please print or	type all requested i	nformation.		
APPLICANT:	Name <u>California Po</u>	rtland Cement (Company Telephone	(714) 825-4260
	Address 695 So. Ra	ncho Avenue/P.(). Box 947	
	City <u>Colton</u>		State <u>CA</u>	Zip 92324-0514
REPRESENTATIVE:	Name John W. Rains		Telephone	(714) 825-4260
-	Address P.O. Box 9	47		
-	CityColton		State <u>CA</u>	Zip 92324-0514
OPERATOR:	Name <u>California Po</u>	rtland Cement (Company Telephone	(714) 825-4260
• •	Address 695 So. Ra	ncho Avenue/P.(). Box 947	
	City <u>Colton</u>		State <u>CA</u>	Zi <u>p 92324-051</u> 4
LIST ANY OTHER NAM	N OUECT: Superior Lim ES OR APPLICATIONS TR			n known by:
	MINED Quartzite	6N	Dancer Au	
	R PROJECT: TOWNSHIP			
	16 SBEM OR MDEM (·		
	7"47"(AS TAKEN FROM TI			
MAXIMUM TOTAL YEAR	LY PRODUCTION: (CROSS		·	
	(CU YDS)/YR ONS) (CU YDS)/YR TONS) /YR (TONS (CU YDS)/YR	ORE	#5,000 C.Y.	TOTAL +5,000 C.Y. per year +100,000 TPY *

See page 6 of Reclamation Plan text for additional details.

Page 8

5.	TYPE OF OPERATION (CHECK WHERE APPLIC	CABLE):
	DRILL AND BLAST, SHOVEL/TRUCK LOADER/TRUCK UNDERGROUND	ALLUVIAL TERRACE X HILLSIDE X HARDROCK METALIC X NON-METALIC SAND AND GRAVEL X QUARRY OTHER
6.	MINE DIMENSIONS	
		3500 Ft. Elev. AXIMUM DEPTH 380 Ft. MAXIMUM LENGTH 1300'
	OVERALL PIT.SLOPE ANGLE 45 M	EXIMUM SLOPE ANGLE 85 MAXIMUM WIDTE 7001
	ANGLE OF REPOSE FOR NATIVE OR HOST MA	ATERIALS ± 36 O
	BENCH HEIGHT 20' SA	AFETY BERM WIDTH 6'
7.	CHECK ANY OF THE FOLLOWING ITEMS THAT MINE OR PROJECT SITE.	MAY BE CONDUCTED AT OR CONSTRUCTED ON THE
	ACCESS ROADS ASPHALT BATCH PLANT BATHHOUSE (DRY) X BLASTING CONCRETE BATCH PLANT CONVEYORS (portable) X CRUSHERS (portable) EXPLOSIVE STORAGE OFFICE SITE ON-SITE LIVING QUARTERS X PARKING AREA	_ SETTLING PONDS _ SHEDS _ SHOPS _ STOCKPILES _ TAILINGS DAMS TANKS
8.	OPERATING TIMES	
	OPERATION IS: Continuous X Sec Load & Haul IF SEASONAL OR INTERMITTENT, CHECK MG	THEY T OCTORER
	X FEBRUARY X MAY X MARCH JUNE	AUGUST X NOVEMBER X SEPTEMBER X DECEMBER
	OPERATING TIMES: Depending upon plant uously	t requirements quarry may operate contin-
	OPERATING DAYS/WEEK5	DAILY HOURS OF OPERATION Sumup to Sunset
	ESTIMATED STARTING DATE Operating Mine	ESTIMATED OPERATING LIPE + 50 Yrs
		ESTIMATED RECLAMATION COMPLETION 2041

9.	SIZE OF OPERATION:
	28.21 Acres Patented
	TOTAL HOLDING IN ACRES 20.00 Acres Mill Sites TOTAL ACRES TO BE PERMITTED 44.21
	Acres
	TOTAL ACRES TO BE DISTURBED AND RECLAIMED (INCLUDING ROADS) +30 Acres
	TOTAL ACRES:
	OWNED LEASED
	28.21 PATENTED SUB-LEASED
	UNPATENTED OTHER Millsites (20 Acres)
10.	SITE ACCESS:
10.	DILL RUCLOS:
	DESCRIBE ALL ACCESS ROUTES INTO THE MINE SITE, INCLUDING ALL ROADS OFF YOUR
	PROPERTY USED IN CONNECTION WITH MINE PRODUCTION OR WASTE DISPOSAL See attached
	map showing ingress and egress
	MAD SHOWLING THAT CAS ALLO GREESS
**	USE ADDITIONAL PAPER IF NECESSARY, AS ALL ROUTES MUST BE COMPLETELY DESCRIBED:
•	TOUR REPORTED IN THE HEADSDARIES AND MOSTED HOST BE CONTINUEDED.
11.	NUMBER OF TRUCK TRIPS/DAY FOR EACH TYPE OF VEHICLE_+20 - 25 per day
•	depending upon plant requirements
12.	DESCRIBE THE PROPOSED SEWAGE DISPOSAL METHOD USED AT THE SITE.
	Portable toilets used with removal for offsite disposal
	RECLAMATION
13.	TOTAL HOLDINGS 48.21 Acres
14.	TOTAL AREA DISTURBED AND RECLAIMED, INCLUDING ROADS + 30 Acres
15.	ESTIMATED TIME FOR RECLAMATION TO START Mining intermittent, impossible to
	ESTIMATED TIME FOR RECLAMATION TO BE COMPLETED determine time table due the
	Year 2041 uncertainty of when full scale operations will begin.
16.	RECLAMATION METHODS (check where applicable)
	Overburden placed on benches
	Backfilling and grading X Rehabilitation of Drainage Stabilization of slopes X Equipment and Refuse Removal X Resciling and reversetation Mitigate Parameter T
	Stabilization of slopes X Equipment and Refuse Removal X
	Resoiling and revegetation Mitigate Hazards X
4	
17.	PROPOSED OR POTENTIAL USE OF THE LAND AFTER RECLAMATION: Open Space

ENVIRONMENTAL PUBLIC WORKS AGENCY LAND MANAGEMENT DEPARTMENT OFFICE OF PLANNING

MINING ENVIRONMENTAL ASSESSMENT SUMMARY FORM (In lieu of PEDF) Date_

I E	Please print or type all requested information. Incomplete applications and/or inaccurate exhibits will not be accepted.
t	NAME OF MINE OR PROJECT: Superior Limestone Placer Property
7	TYPE OF MINE OR PROJECT: Quartzite Quarry
1	PROJECT OR MINE GENERAL LOCATION: Approximately 2.5 Miles (straight line dis-
1	tance) northeast of Oro Grande, near Quartzite Mountain
]	PROJECT OR MINE LEGAL LOCATION: SECTION(S) 9 and 16 TOWNSHIP 6N
	RANGE 4W SBEMYMDEM (X one) FOTAL HOLDINGS 48.21 ACRES: AREA TO BE DISTURBED AND RECLAIMED +30 ACRES.
1	AIR QUALITY: LIST NUMBER AND TYPES OF VEHICLES AND EQUIPMENT ASSOCIATED WITH THE PROJECT. Drill, Dozer, Loader, Grader, Trucks, Water Truck, Portable Crushing and Screening Plant. LIST ASSOCIATED EMISSIONS WITH THE PROPOSED PROJECT (I.E., DUST DIESEL)
	dust, diesel, and gasoline
١	WATER QUALITY/SUPPLY: SOURCE OF FRESH WATER Imported
	TOTAL GALLONS OF WATER TO BE USED PER DAY 10-20,000 Gal/Day
	GALLONS PER DAY RECYCLED None GALLONS PER DAY FRESH 10-20,000
	CHEMICALS TO BE USED: None, except possible dust suppressants (MgCl2 or CaCl2
	METHOD OF CHEMICAL DISPOSAL: If used-roads and/or crushing system (Dust Cont.
	PROPOSED SEWAGE SYSTEM: None
:	ENERGY ELECTRICITY TO BE CONSUMED BY THE PROJECT/MONTH None KWH.
	NATURAL GAS TO BE CONSUMED BY THE PROJECT/MONTH None CU FT.
	OTHER FUELS TO BE CONSUMED BY THE PROJECT: LIST TYPE AND QUANTITY: Diesel + 500 Gals/Day doesn't include haul trucks
	DESCRIBE IN GENERAL THE TYPE OF VEGETATION AND THE PERCENTAGE OF THE SITE THAT IT COVERS. LIST THE ANIMALS THAT YOU HAVE SEEN OR THAT ARE KNOWN TO OCCUR ON THE SITE.
1	Area would be classified as "Desert Shrub". Creosote bush is the dominate plant.
	Jackrabbits, small birds, ground squirrels, reptiles (lizards), etc. (See Appendix 3 Biologic Report)

10.	DESCRIBE IN GENERAL THE TOPOGRAPHY (I.E., SLOPES, LANDFORMS, LANDSCAPE) AND RELIEF OF THE SITE.
	Hills that have steep slopes, Desert shrub community.
11.	DESCRIBE ANY DRAINAGE CHANNELS THAT EXIST ON THE SITE.
	One canvon that cuts across a small portion of the northwest end of the property
12.	DESCRIBE ANY ALTERATION AND/OR IMPROVEMENTS ON THE SITE.
	There are no alterations or improvements on the property except for past mining
	operations. Landforms will change during mining.
13.	DESCRIBE THE LAND USES ON THE ADJACENT LAND IN EACH DIRECTION. NOTE ANY MAJOR OR IMPORTANT NATURAL OR MAN-MADE FEATURES ON THE ADJACENT LAND; FOR EXAMPLE, MAJOR HIGHWAYS, STREAM CHANNELS, OR OTHER NOTABLE FEATURES.
	NORTH: Mining
	EAST: Mining
	SOUTH: Relay Stations
	WEST: Open Space
14.	
	Land forms to change based on final mining design - See .map.
15.	IF YOUR PROJECT REQUIRES ANY PERMITS FROM OTHER AGENCIES, PLEASE IDENTIFY THE AGENCY AND TYPE OF PERMIT. SOME AGENCIES OR DEPARTMENTS THAT YOU MAY HAVE TO OBTAIN PERMITS FROM ARE LISTED BELOW.
	.AIR POLLUTION CONTROL .BLM .COUNTY ENVIRONMENTAL HEALTH DEPARTMENT .FISH AND GAME .STATE REGIONAL WATER QUALITY CONTROL BOARD .FOREST SERVICE
	TYPE OF PERMIT Reclamation - Grandfathered mining operation. Mining prior to
	SMARI
	SIGNATURE (PROJECT PROPONENT OR OWNER OF RECORD)
	+ parps (1) 16 1900

ENVIRONMENTAL PUBLIC WORKS COXY LAND MANAGEMENT DEPARTMENT OFFICE OF PLANNING

APPLICATION FOR MINING/RECLAMATION SITE APPROVAL DEVELOPMENT CODE DIVISION 12, CHAPTERS 1

		•			DATE:	:	
	This application	if for a: (ch	eck the appropriat	e boxes)		·	
	X Mining Op	eration	Asphalt Batch Pla	n Oth	er		
		peration	Concrete Batch Pl	ant		· · · · · · · · · · · · · · · · · · ·	
	Sand/Grav	el Pit	Screening Plant				
			pereding riage	•		· · · · · · · · · · · · · · · · · · ·	
L.	APPLICANT:	<u>California Por</u>	tland Cement Compa	ny			
	MAILING ADDRESS:	P.O. Box 947					
		Street/P.O. Bo		1			
		Colton,	_CA	92324-0514	(714)	825-4260	
		city	State			(8 a.m5	
2.	ENGINEER/REPRE	SENTATIVE:JC	ohn W. Rains			•	
	MAILING ADDRESS:	P.O. Box 947					
		Street/P.O. Bo	ox ·				
		, , , , , , , , , , , , , , , , , , , ,					
		Colton,		92324-0514			
		City	State	Zip (Telephone	(8 a.m5	p.m.)
3.	LAND OWNER:	California Por	tland Cement Compa	ny			
	MAILING ADDRESS:	P.O. Box 947	•	•			
		Street/P.O. Bo					· <u> </u>
		Colton,	CA	92324-0514	(714)	825-4260	
	• .	City	State	Zip '	Telephone	(8 a.m5	p.m.)
1.	OPERATOR:	California Por	tland Cement Compa	ny			
					-		
	MALLING ADDRESS:	695 South Ranc	cho Avenue / Box 947	7			 .
		Street/P.O. Bo		00004 053	4 (53.4)		
	•	City	<u>CA</u> State				 ,
		CILLY	state	Zip :	rerebuoue	(8 a.m5	p.m.)
	PARCEL NO.(S)	469-191-08					
	TOTAL ACRES OF P	ARCEL 28.21 AC	res & 20 Acres Mil	lsites			
	PROJECT OR MINE	LEGAL LOCATION	SECTION(S) 9 and 3	16			
	TOWNSHIP	6N RANG	GE 4W	(SBEM)OR 1	MDBM (cir	cle one)	

NOTE:

If more than one person is involved in the ownership of the property, a separate page must be attached to this application which lists the names and addresses of all persons having interest in the ownership of mineral rights.

All applicants for surface mining permit who are not also the record owner(s) of the property must submit a signed statement by the property/mineral rights owner(s) authorizing them to act on the behalf.

APPLICANT'S CERTIFICATION OF FILING: (Legal owner of the property must sign)

I certify under penalty of perjury that I am the owner of record, or as noted below and the owner of record has knowledge of and consents to the proposed surface mining permit application for this property. I further certify that the information continued herein is true and correct to the best of my knowledge.

permit application for this property. In herein is true and correct to the best of	my knowledge.				
Owner of Possessory Inter	rest or Mineral Rights.				
Legal Owner(s) (all in appear on the deed to the	ndividual owners must sign as their names e land).				
X Corporate Officer(s) emp	owered to sign for the corporation.				
certified Power of Attor	ring Power of Attorney for this action (a mey document must accompany the application				
form) Dated					
Χ.	Signature				
	JIM HURT				
	Print Name				
	California Portland Cement Company				
	Company				
FOR OFFICE	TAL USE ONLY				
GENERAL LOCATION OF PROPERTY. Location f	·				
Describe proposed use of property or reas	ons for this action:				
INDEX NO	COMMUNITY PLAN MAP				
ZONE CLASSIFICATION	GENERAL PIAN REF				
LAND USE DISTRICT	GP/CP RECOMMENDATION				
ZONE/LAND USE MAP	CITY'S SPHERE				
FILING PATE	A.L.U.C				

NOTIFICATION OF RESPONSIBILITY

Required by all Property Owners Optional Form No. 1 of 2

I,, the undersigned, representing (the)
California Portland Cement Company (Myself/Exmpany/corporation) legal holder of the possessory
interest, mineral and/or surface rights to the property commonly known as the
Superior Limestone Placer Property located in Township 6N
Range 4W Section(s) 9 and 16 , (SBEM) or MDEM (circle one)) Meridian, do
hereby acknowledge to abide by the Reclamation Plan and the Conditions of Approval
approved by San Bernardino County.
/ (s)
Date
Individual Acknowledgement
STATE OF CALIFORNIA COUNTY OF Las congress On 16 H January 1990 before me, the undersigned, a Notary Public in and for said County and State, personally appeared For Notary Seal or Stamp OFFICIAL SEAL RUBY JEANE LOS ANGELES COUNTY MY COMM. EXP. DEC. 27, 1993
ITIM L. HURT
known to me to be the person_ or proven to me on the basis of satisfactory evidence whose name_/S subscribed to the within instrument and acknowledged that _//S executed the same.
Notary's Signature Ruley Jeans
Corporation Acknowledgement
STATE OF CALIFORNIA) COUNTY OF) SS. On before me, the undersigned, a Notary Public in and for said County and State, personally appeared
known to me or proven on the basis of satisfactory evidence to be the person who executed the within instrument on behalf of the corporation therein named and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a Resolution of its Board of Directors.
Notary's Signature

SUPERIOR SILICA

MINING/RECLAMATION OPERATING PLAN OUTLINE

MINING

1. Mining Operation Introduction:

The project is located in the upper Mojave Desert northwest of Victorville, near the desert community of Oro Grande (Figure 1). The project site is located on the northwest side of Quartzite Mountain and south of Oro Grande Canyon, 2.5 miles east of Oro Grande in Sections 9 and 16, T6N, R4W SBBM (Figures 2 & 3).

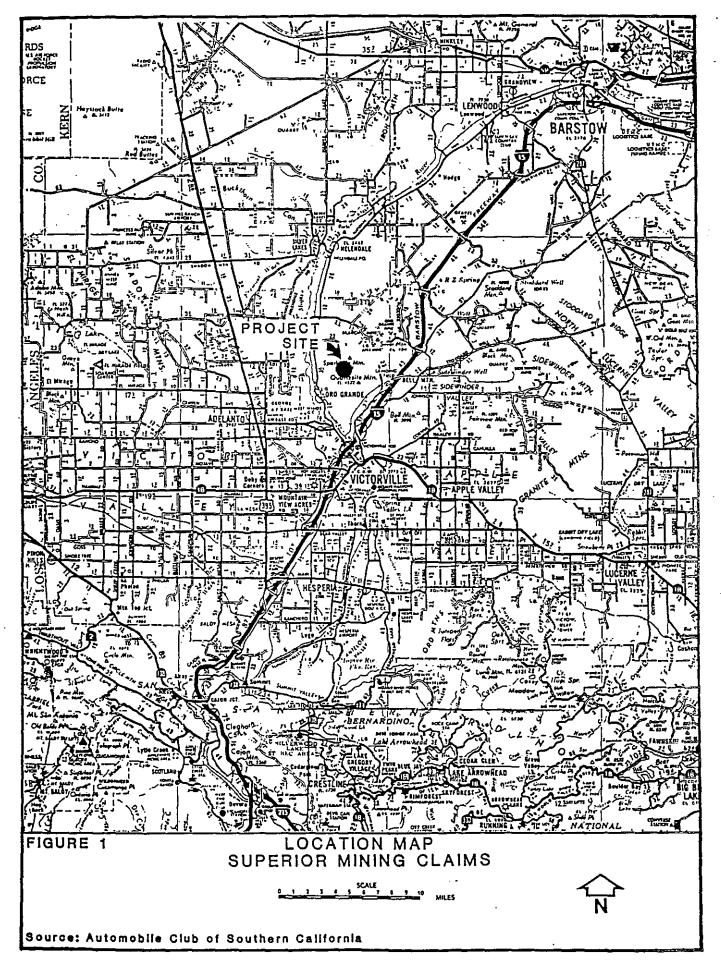
Present operations at the site are confined to the base of the Initial mining plans were developed for the most accessible silica outcrop area requiring the least amount of development work, this being the base of the deposit. developed in the initial phase of mining allowed time to do some preliminary drilling so as to more accurately define pit limits and establish minable ore reserves. In the near future, when fullscale mining operations (drill, blast, crush and haul) are required to supply the Colton plant's total silica requirements, mining will be conducted in a logical and proper top to bottom mining sequence. That is, the top benches (3620, 3640, etc.) will be mined first with succeeding lower benches mined at a later date. This sequence of mining will be continued until the deposit is depleted. Overburden removal, when required, will be placed on a waste dump as indicated by the attached maps (Figure 4). After each mining level has been mined out, the entrance to that level will be blocked by the use of berms and/or large boulders. Overburden on the waste piles or during removal will be placed on the mined out benches to encourage revegetation.

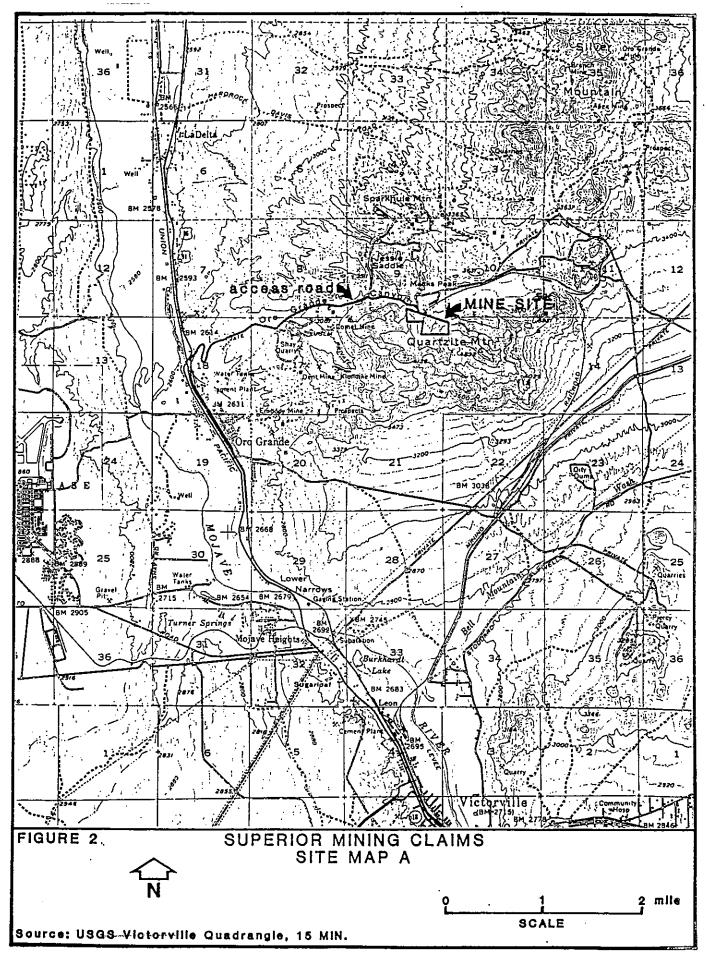
Mining throughout the area has been and still is the dominant land use.

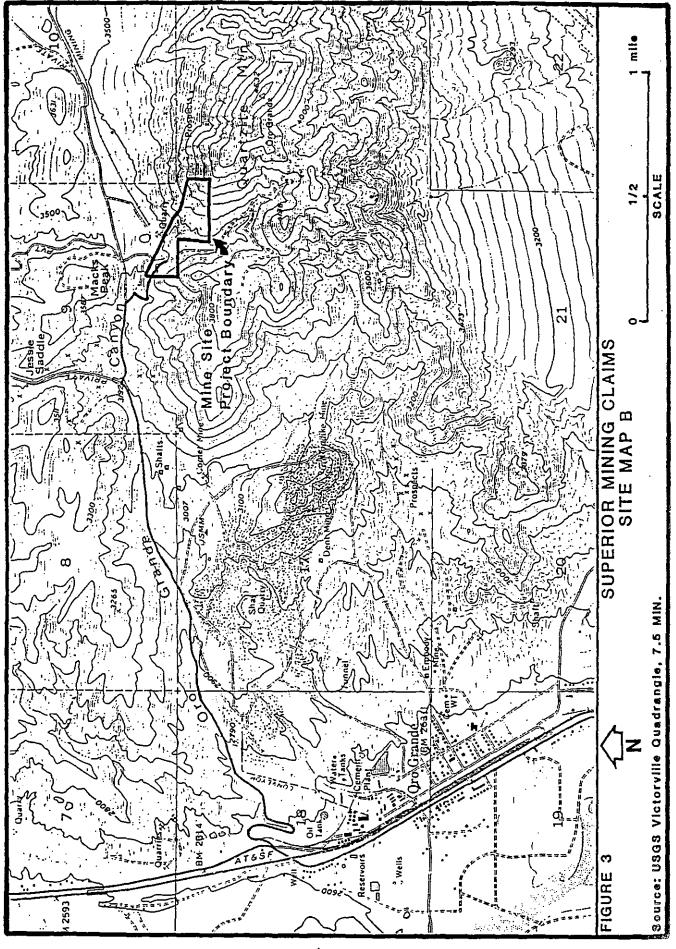
2. Mine Waste:

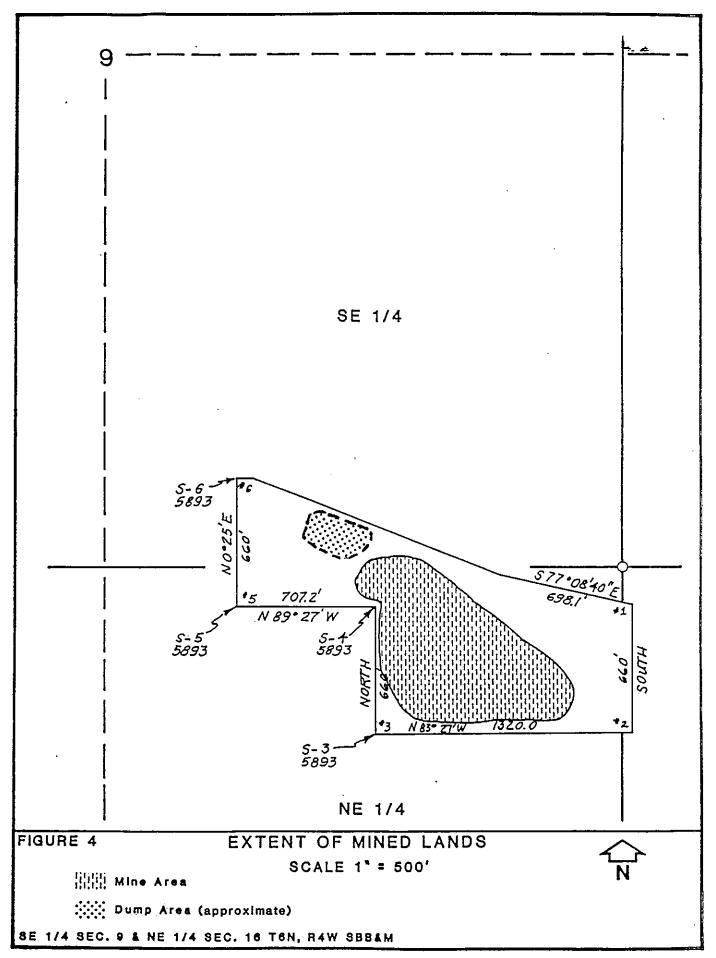
.

- (a) Type of Waste Produced Basically there are no gangue minerals associated with the quartzite formation. Generally the entire body of quartzite can be mined and utilized in the manufacture of Portland cement. Some overburden will need to be removed from some areas. This will consist of rock, sand, silts and clays. Vegetation is extremely limited.
- (b) Amount of Waste Overburden is from zero to fifteen feet thick across the deposit. Approximately 5,000 cu. yds of overburden would be removed per year. Total waste









amount has not been determined, but should not exceed 100,000 cu. yds during the life of the pit.

(c) Disposal Method - Overburden will be placed on a previously used waste dump at the base of the pit as shown by the attached maps (Figure 4). Methods for removal will consist of ripping, pushing, loading of material and hauling by loader, truck or conveyor to the waste pile.

3. Planned Ore Processing Methods to be used on Site:

The material to be mined will be drilled, blasted and then run through a portable crushing and screening plant located at the site. The crushed material will be stockpiled in quantities up to ±25,000 tons. Material will be loaded on to trucks for hauling to the Cement plant(s) (Colton and/or Mojave) as required. Initial level of operation could be 20-60,000 TPY. Ultimately, level is expected to be 100,000 TPY, depending on plant requirements.

4. Production Water Data:

(a) Fresh Water

Water will be used for dust control in the quarry and on haul roads. When crushing operations are initiated, water will also be used for dust control. Total water requirements cannot be accurately determined at this time due to The California Portland Cement Companies intermittent mining operation and plant requirements.

Judging from similar operations, an estimate of 10,000 to 20,000 gallons per day will probably be used. Water used will be hauled to the quarry site via truck from a local outside source, probably Riverside Cement Company.

(b) <u>Wastewater</u>

There will be no wastewater. Fresh water will be used as a dust suppressant. As planned, no chemicals will be added to the water. The only possible exception to this (if necessary) would be chemicals (MgCl₂ or CaCl₂) added to the water for use as a dust suppressant on the roads and crushing system. The only potential contaminant would be the fuel oil used to run the trucks, loader, portable crusher, etc.. Any spills would be scraped up with the mined material, hauled to the cement plant and run through the kiln. Portable toilets would be provided for domestic waste with removal for offsite disposal.

5. Erosion and Sedimentation Control:

Because of the mining location, (side hill cuts) drainage will not be affected before, during or after operations have been completed. There will be no streambed or streambank erosion. Sedimentation treatment will not be required. Material will not be washed on site.

Stockpiled materials (-3/4") will be stored on site following crushing. Very little if any erosion will take place due to the size of the material. Silica material will be hauled upon completion of crushing as required to the cement plant(s). Stockpiles will be small (20-25,000 tons) and will be on site only for a short duration.

6. Blasting:

All blasting will be conducted by Contractors with an "Explosives Permit". No explosives will be stored on site. No structures or residents exist in the immediate area. Radio towers and associated facilities are located on top of quartzite mountain approximately 1/2 mile to the southeast. These will not be affected by the limited amount of blasting anticipated at the site.

SUPERIOR SILICA

RECLAMATION

1. Land Use:

The existing land use on site is mining. Surrounding land uses are mining, or open space. Radio transmission towers and associated facilities are located on Quartzite Mountain, 1/2 mile to the southeast (Figure 2). The nearest development is Riverside Cement Plant located approximately 2.5 miles to the southwest in the community of Oro Grande.

A cultural resources records check was completed for the site by the San Bernardino County Archaeologic Information Center. No recorded presence of prehistoric and historic archaeology, historic structures and heritage properties were found. A copy of the May 23, 1989 records search is attached.

2. Visibility:

As currently designed, the proposed operation is screened by natural topography from all highways, residences, commercial developments and recreation areas. The site is only visible to immediately adjacent mine operations.

3. Vegetation:

The area is sparsely covered with vegetation. Most of the shrubs are spaced 10 to 30 feet apart. Of the major brushland communities, this area would be classified as "Desert Shrub". Creosote Brush (Larrea divaricata) is the dominate plant. Associated plants are:

- 1. Burro-weed (<u>Franseria</u> <u>dumosa</u>)
- 2. Desert Saltgrass (Distichlis stricta)
- 3. White burrobrush (Hymenoclea salsola)
- 4. Desert trumpet (Eriogonum inflatum)
- 5. Rabbitbrush (Chrysothammus visadifforus)
- 6. Also included would be various small cacti and annual grasses in small concentrations.

This area contributes little forage for livestock or other wildlife. Disturbance will be confined to approximately 30 acres.

4. Wildlife:

Wildlife in the area is limited. Jackrabbits, small birds and reptiles (lizards) have been sited. Additional wildlife is expected to exist in the area but would be classified as nocturnal

in nature. The closest source of water is approximately 2.5 miles (SW of the property) at the Riverside Cement Plant.

5. Reclamation and Reclamation Schedule:

A phasing timetable is not being prepared. Reclamation for this operation is to secure the property and block the entrances to the various benches, thereby protecting the trespassing public. Benches will be blasted and material will be sloped. Overburden will be placed on the mined out benches to encourage revegetation. Present plant life has propagated itself in the outcrop areas (cracks in the rocks) where the soil cover is basically non-existent. It would be expected that natural vegetation would occur in the mined out areas during and after mining operations. This natural revegetation process is evident on the property in areas where blasting has occurred and the vegetative material has been undisturbed.

6. Revegetation:

Because of the present thin soil cover (in places hard rock outcrops have no soil cover) and the relative low density and concentration of vegetation, it would be impractical to revegetate the mining areas. Natural revegetation will occur, as described above.

7. Cleanup:

Any residual equipment, structures, etc. will be removed from the site at the completion of mining operations. Entrances will be blocked and trespass signs posted.

8. Post-Reclamation and Future Mining:

Upon completion of reclamation, the area will have 20' benches terraced up the hill, and the previously existing waste dump will be larger. A berm and/or large boulders to prevent access by the trespassing public will be placed at both ends of all the benches as required. No equipment or structures will remain. Mining on the site and on surrounding properties would be unaffected by reclamation. After reclamation, the site will be used as open space.

9. Slopes and Slope Treatment:

Final pit slopes will be carried at a maximum slope of 1:1 (45°) 20 feet vertical and 20 feet horizontal. Experience in the area indicates slope stability is very good as shown by several operations, both past and present. The quartzite is very massive and competent indicating slope failure would be negligible. Final face slopes will be blasted resulting in flatter finished slopes.

The waste pile slopes will be at the materials angle of repose, approximately 36°. This should be quite stable as indicated by the present waste pile which has been on site for many years.

10. Ponds, Reservoirs, Tailings, Wastes:

- (a) Because of the small size of the waste dump, it would be expected that stabilization would be unnecessary. From the top to the bottom of the dump, height will be 50' maximum. Dump face will slope at approximately 36° at the materials natural angle of repose.
- (b) No dams or embankments will be used.

11. Soils and Fine Textured Waste:

Soil is pinkish grey to moderate brown with abundant fragments of schist, quartzite and some limestone. Some of the fragments are heavily coated and cemented with caliche. When encountered, the soil will be removed and hauled to the mine waste area. Soil covers a small portion of the area. As stated previously, overburden will be placed on mined out benches to encourage revegetation.

12. Drainage and Erosion Controls:

Because of the mining location (side hill cuts) drainage will not be affected before, during or after operations have been completed. There will be no streambed or streambank erosion and sedimentation treatment required. Natural drainage will be slightly diverted with the placement of the waste pile. Reclamation drainage will divert this flow to the east, around the waste dump and into its natural course. The drainage routes are indicated on the reclamation plan map. A drainage berm is also identified to prevent surface flow from exiting the site onto the adjacent property.

13. Public Safety:

The only residual hazards after completion of mining would be the potential hazard of near vertical faces caused by bench mining. In order to protect the trespassing public from these hazards, berms of alluvium and/or boulders will be placed at strategic locations (entrance to bench levels), thereby preventing the public in vehicles from entering the bench levels and exposing themselves to these potential hazards. Face slopes will be blasted resulting in flatter finished slopes reducing the potential for a residual hazard. No trespassing signs are posted on both roads approaching the property. These signs have been in place for several years.

14. Monitoring and Maintenance:

- (a) No baseline monitoring has been done.
- (b) Following reclamation, all properties are periodically checked for conformance with established criteria. For the first two years, the sites are inspected semi-annually. When site stability is confirmed, inspections by company personnel are given at least bi-annually.
- (c) The Mine Development Department, attached to the Central Engineering Group of California Portland Cement Co., located at Colton, California, is responsible for the maintenance and monitoring program.

15. Reclamation Assurance:

Past mining and reclamation history indicates that California Portland Cement Company has always faithfully completed plans and reclaimed land once finished with mining. Any problems that have arisen have been dealt with quickly and efficiently; maintenance has been prompt. It has been this way in the past, and as Company policy, will remain this way in the future.

SUPERIOR SILICA

GEOLOGY

Describe Geology:

See attached geologic maps showing surface geology (Figure 5). The following information was derived from California Division of Mines & Geology Bulletin 187, "Quartzite in California". Units of the Oro Grande Series have furnished several million tons of high purity quartzite since 1928. Most of the output has been consumed by the Portland cement industry.

The Oro Grande Series of late Paleozoic, probably carboniferous, age is limited in occurrence. Within an area of five square miles around Quartzite Mountain, the series contains large masses of uniform, high-purity quartzite.

Previous Work and Acknowledgments

The Quartzite Mountain area is included in Bowen's (1954) report on the geology and mineral resources of the Barstow 30-minute quadrangle. As part of a larger study, the U.S. Geological Survey remapped the area on a scale of 1:12,000 and have described its nonmetallic mineral resources. The discussions that follows is summarized from that report.

Descriptive Geology

The Oro Grande Series is a sequence of metamorphic rocks that has been complexly folded and faulted. Rocks of the Triassic Sidewinder Volcanic Series intrude and overlap the Oro Grande Series.

Both Series are intruded by granite rocks of early Cretaceous or late Jurassic age. The type section of the Oro Grande Series on the northeast slope of Quartzite Mountain is as follows, bottom to top, average thickness in feet: (1) white dolomite, 1,200; (2) dark schist-hornfels, 350; (3) blue-grey limestone, 250; (4) schist-quartzite, 60; (5) lower quartzite, 250; (6) black schist with limestone subunits, 500; (7) upper quartzite, 250.

The two quartzite units are indistinguishable from each other. They are composed of vitreous, light to medium grey, massive quartzite with only occasional suggestions of bedding. Weathered surfaces and joint surfaces commonly are ironstained. In thin section, the quartzite is seen to be composed mostly of quartz in the form of irregular, interlocking grains ranging from 0.2 to 1 millimeter in diameter. The rounded outlined of the original sand grains can be detected here and there but mostly have been obliterated. Finely divided sericite is widely distributed but not

abundant, both along grain boundaries and included within quartz grains. Calcite was not detected, and feldspar is very scarce.

Minute grains of sphene, tourmaline, zircon, magnetite, limonite and pyrite were identified but are not abundant.

The stratigraphic sections of the various fault blocks cannot be correlated with the type section with confidence because the structure of the Quartzite Mountain area is complex and the units of the type section lack characteristic properties. It is thought, however, that most of the massive quartzite units probably are equivalents of unit 7 of the type section.

Generally, the quartzite orebody strikes N 60 W. and dips 40 to 45 degrees NE. It is bounded on the NE and SW sides by schist material. The orebody itself has been highly folded and faulted which is evident by the varying strikes and dips recorded. Several holes have been drilled helping to delineate the orebody.

The quartzite is massive, even-grained, medium-crystalline and offwhite. Limestone is massive, blue-grey and medium crystalline. Schist is a quartz-mica shist, black and severely crumpled.

Describe Adverse Geologic Conditions:

No geologic conditions could be identified that would adversely affect the project. See attached CDMG 1:250,000 scale San Bernardino Sheet showing area geology (Figure 5). A review of geologic literature and paleontologic resources was conducted by the San Bernardino County Museum. No paleontologic resources have been reported in the area. Operators are recommended to notify the County Museum in the event that wood rat middens are encountered during excavation. A copy of the report is attached.

SUPERIOR SILICA

HYDROLOGY/GROUND WATER

1. Surface and Groundwater:

- (a) The site is in an arid, desert environment with little vegetation. Temperature for the area ranges from 10°F to 110°F. Rainfall averages 8 to 10 inches each year.
- (b) The site is on the end of a ridge with water draining away from and around the site. Because of the mining location, major drainage will not be affected before, during or after operations have been completed. Similarly, drainage will not affect mining. Minor drainage improvements will be implemented in order to accommodate the waste pile location.
- (c) Erosion and drainage control, along with sedimentation treatment will not be needed on site. A berm will be constructed to prevent surface drainage from impacting the mine pit to the north/northeast (See plan).
- (d) The project site is not within a recognized floodway or 100 year flood plain.
- (e) Groundwater data is unavailable at this time. Previous drill holes have not encountered water.
- (f) Water wells will not be utilized at the site.
- (g) The site is not within a groundwater recharge area.
- (h) No toxic substances will be stored or used on the site.
- (i) Stream gauging stations do not exist at the project site.

SUPERIOR LIMESTONE PLACER CLAIM

Land Control of the C

This patented property is located on the northeast side of Quartzite Mountain about 2.5 miles northeast of Oro Grande, San Bernardino County, California. It is situated in Sections 9 and 16, T6N, R4W, S.B.B.&M.

The property covers 28.21 acres and was purchased by California Portland Cement Co. from American Crystal Sugar Co. in 1942. In 1975, four 5 acre millsites were located on the south and adjacent to the Superior Limestone placer claim. Apparently some trespass of the north boundary occurred during quarry operations by Southwestern Portland Cement Co. on their Summit and Summit No. 2 placer claims. It is estimated that up to 500,000 tons of limestone were removed from the Superior property during this trespass. It is not known when these mining operations took place, but it is estimated they occurred at least 50 years ago.

The property was mapped geologically by CPC personnel in 1962. The California State Division of Mines and Geology mapped this area in 1959 and 1960. They issued Special Report No. 84 in 1965, covering the Quartzite Mountain area. Additional development work by CPC personnel occurred from 1973 through 1975. This included:

- 1. Topographic map preparation 1973
- 2. Development drilling Early 1975
- 3. Reserve estimates 1975

Mining operations began in early 1974 with the drilling and blasting of 15,000-20,000 tons of quartzite. From 1974 through 1986, this quartzite material was loaded and hauled to the Colton cement plant on an intermittent basis.

A preliminary reclamation plan as required by SMARA 1976 and San Bernardino County was filed per county ordinance in September 1976. No action was taken on this plan. Passage of AB747 required that all vested (prior to SMARA 1976) surface mining operations had to file reclamation plans prior to March 31, 1988 with final approval attained by July 1, 1990.

A revised mining/reclamation plan for the Superior property was filed prior to the March 31, 1988, deadline. Plan approval is pending.

ADDENDUM NO.1

MINING/RECLAMATION PLAN SUPERIOR SILICA MINE

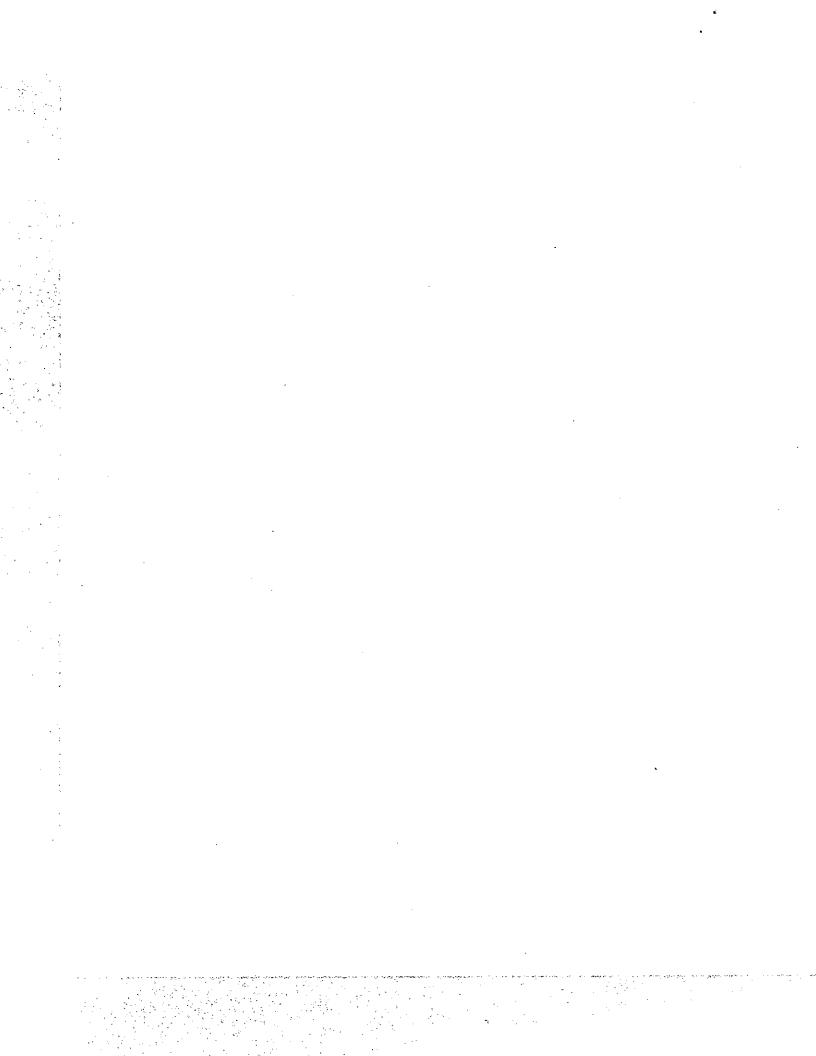
Response to Comments from State Division of Mines and Geology

- 1. The total volume of material to be mined at this site over the permitted 20 year life of the operation is projected to be 1.6 million cubic yards (mil. cy.). Of this volume, 1.5 mil. cy is projected to be ore and 0.1 mil. cy. is projected to be wastes.
- 2. Mining activities at this site were initiated over 50 years ago. These activities were short-lived and active mining of the site did not begin until 1974. Mining activities continued intermittently from 1974 until 1986 when it ceased. Because of the intermittent nature of the mining activities as well as the cessation of activities in 1986, the County has required the applicant to secure a mining permit prior to reactivating the facilities.
- 3. As stated on page 9 of the Reclamation Plan, overburden and waste material will spread over the mined out quarry surfaces. This material will be temporarily stored adjacent to the quarry face being worked. At the completion of mining activities on that face, the stored material will be spread on the bench to provide a growth medium to help implement revegetation activites. The Mining Plan has been revised to show the location of the temporary storage areas.

Our calculation indicates that the waste dump area shown on the Mining Plan has a remaining capacity of about 50,000 cubic yards. Because most of the overburden and wastes are to be spread on mined out benches and other flat surfaces, this waste disposal area has adequate capacity to accommodate the volume of wastes which may be disposed of at that site.

- 4. The Conditions of Approval adopted by the County for this project include a requirement that the applicant provide adequate financial assurance (cash, bond, etc.) to cover implementation of reclamation and mitigation measures prior to the commencement of activities at the site. These funds are to be accessible by both the County and State Geologist.
- 5. This reclamation plan addresses all disturbances associated with operation of the Superior Silica quarry. All areas of disturbance, regardless of when the disturbance occurred are designated for reclamation by this plan.

- 6. The Conditions of Approval for the project require the applicant to submit the following to the County:
 - a. A seed collection study which addresses the availability of native seeds in the area;
 - b. A detailed revegetation plan which addresses the methods proposed to reestablish native vegetation in disturbed areas; and
 - c. A maintenance and monitoring plan to ensure the success of site revegetation.



ζ.			
ζ,			
r		-	
•			
			•
			•
•	•		

				,
				*
				'a