C-3

CONDITIONAL USE PERMIT-PACIFIC CONCRETE AND ROCK (72/CIP-15 & 72/S

RESOLUTION NO. 94 - Sanitary Landfill - TMK: 9-1-16 Por of 6 & 9-2-03: In

Approved April 17, 1973 Expired April 17, 1978

Resolution No. 78-120 granted 90 day extension from April 20, 1978
Resolution No. 78-253 approved renewal of permit for another 5 year period
PERMIT RENEWED UNTIL-APRIL-to JUNE 28, 1983

Conditions:

Noise report-Noise report required within six months of operations additional noise studies may be required

1/18 - Bacer - Brus . Concerned about 1 condition of offromol or Brus requirements . They have retified PER. Bus

RESOLUTION NO. 95 - QUARRY - 9-2-03: 2 and 9-1-16: 4

Approved April 17, 1973

Conditions:

Proposed ust shall comply with moise regulations. Director May caquire noise studies.

Applicant shall submit six months report on the status of the operations noting affirmative action to -comply with conditions including the following:

l. observations of fugitive dust

 report on replanting activiti4es, including the areas replanted and type of vegetation planted.

3. Report on citizens complaints

NO TIME LIMIT

Resolution %5. 94-Sanitary Landfill Operations Tax Map Key 9-1-16L oirtuib if



2344 PAHOUNUI DRIVE / HOHOLULU, HUMAII 96819

RECEIVED

TELEPHONE (808) 845-6441 CABLE "PACGNROC"

1976 H.7/ 15 AM 10 58 November 12, 1976

DEPT OF

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii

Gentlemen:

To constitute of the experience of the con-

Status Reports No. 2 Puu Makakilo Quarry Conditional Use Permit, Condition No. 5 of City Council Resolution No. 95

In accordance with Condition No. 5 of Resolution 95 which authorized a Conditional Use Permit for Pacific Concrete's Pun Makakilo Quarry, transmitted herewith is our second six month's status report.

At the end of 12 month's of operation, the total observed dust emissions from our quarry operations have been practically eliminated. The following is an analysis by sources.

- From quarry traffic. Controlling the traffic speed and maintaining our regularly scheduled road oiling program has eliminated any significant dust emissions from this source.
- 2. From materials collected on elevated decks and conveyors. The metal gratings coupled with a regularly scheduled clean up program has eliminated any significant dust emissions from this source.
- From conveyor transfer chutes and drop off points. Installation of water spray nozzles has eliminated any significant emissions from this potential source of dust.
- From crushers. Wetting the materials prior to crushing and sealing large openings has eliminated any significant dust emission from this source.
- From screens. Covering individual screens and housing some of the units has eliminated any significant dust emission from this source.

THE RESERVE AND ASSESSED.

and shape of our material stockpiles has significantly improved our dust emissions from this source. The moisture condition of the material in the stockpile is also being addressed to control dust from this source.

We have planted approximately 500 trees in the area mauka of the H-1 Freeway; however, the majority of the trees have not survived. It is our opinion that our selection of the type of trees planted could have been a poor choice inassuch as encalyptus and paperbark trees do not seem to flourish in this part of the island. Will review this problem prior to planting any more trees.

In regard to Citizen dust complaint, we have received four complaints about dust from our quarry in the period between May 10, 1976 to date.

On June 21, 1976, Mrs. Charles Gerrior of Makakilo City called to complain about red and grey dust from our quarry. I drove by Makakilo on the inbound lane of H-1 at 9:30 a.m. on June 21, 1976 and was stopped by police due to heavy smoke across the H-1 from burning came. Smoke was blowing directly toward Makakilo City. I checked with our quarry superintendent who confirmed that we were moving red soil overburden which was dustier than our normal operation. I attempted to contact Mrs. Gerrior by phone on June 21 and June 22 and was unsuccessful.

I drove to Makakilo on June 23, 1976 and noted severe red dust from the canefields mauka of the H-l and Diamond Head of Makakilo City at 2:15 p.m. The dust was blowing directly to Makakilo City. We were not operating our overburden removal that day. Both the upper and lower sites of our quarry were free of dust.

I called the Department of Health's Pollution Investigation and Enforcement Branch to have an investigator drive by the area to confirm that PC&R's quarrying operation was dust free and that there was severe dust emission from the canefield cultivation operation which was blowing to Makakilo City. I then called Mrs. Gerrior at 4:10 p.m. on June 23 to question her about the dust at her home that day. She claimed that PC&R was kicking up red dust that day. When I asked her about the canefield operation, she stated that this dust bypasses Makakilo City.

We received three complaints of dust regarding movement of overburden on July 3, 1976. The complainants were

Mr. Charles Gerrior of Makakilo, Mrs. Eleanor Beimis of Makakilo and a special complaint from the Department of Health's Investigation and Enforcement Branch representing several Makakilo residents. The July 3, 1976 incident pointed out to PECR a serious deficiency in our quarrying process where the intermittent movement of dry red soil overlying our rock deposit was not properly engineered into our dust control system. We had not moved large amounts of overburden off the hill in the past inasmuch as we had collected this material and left it on top of the hill.

We promised the Department of Health that we would not move any large quantities of overburden other than a few truckloads to observe the effectiveness of several alternative dust suppression systems which we contemplated engineering. Attachment I describes how PCSR solved this problem of moving overburden.

We received a request from the Investigation and Enforcement Branch of the Department of Health in September to lower the height of a stockpile because of a potential dust hazard. The peak of the conical shape stockpile was almost at the same elevation as the H-1 Freeway and was visually very prominent in our quarry. A loader was assigned to lowering the height mid flatening the height of this stockpile over two Saturdays and on October 4, 1976 we notified the Department of Health that this request had been accomplished.

On August 26, 1976 we received a letter from the American Lung Association of Hawaii informing us that our Makakilo Quarry operations was nominated for the Association's Third Annual Blue Sky Award. The inspection was conducted on September 2, 1976 and the response from the committee was very complimentary. (See Attachment II.)

Yours very truly

FREDERICK K. SEKIYA
Technical Services Director

Attachments

ATTACHMENT I

Overburden Plan

On July 22, 1976, I called the Department of Health's Pollution Investigation and Enforcement Branch and informed them of our plan to increase water points at the transfer chute between conveyors 5 and 6 and at the end of stacking conveyor 7. We ran two loads on July 26, 19/6 and aborted the trial because the dust emission was not acceptable.

We then sealed the transfer chute at conveyors 5 and 6 and ran two more loads on September 30, 1976 with the height of the stacking conveyor lowered to the minimum allowable by the system. We aborted this rrial because the dust was still bad.

We added six more sprays on conveyor C5 and closed the feed hopper gate to lower the amount of material on the conveyor. We ran four more loads on October 7, 1976. The dust at the end of the conveyor was bad but the emission at the C5-C6 transfer point was much improved although still not acceptable to us.

Our engineering department then designed a water spray box for the end of stacking conveyor 7 where the material would be sprayed from 360 wengle as it passed through this box. We ran four loads of overburden on October 22. This trial was aborted when the material knocked the water spray box off the end of the conveyor. Transfer chute between conveyors 5 and 6 improved slightly but was still not acceptable.

We then repaired the water spray box at the end of the stacking conveyor and added about 20 more water sprays at the discharge end of the chute between conveyors 5 and 6. In addition, we decided to run the overburden through the whole primary crushing system to take advantage of the water spray points in this system. We ran overburden all day on November 5, 6 and 8. There was absolutely no dust emitted at either the transfer point between conveyors 5 and 6 or the end of stacking conveyor 7.

11/12/76



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

RECEIVED

TELEPHONE (808) 845-6441

9 PM 1:13 78 MAY

May 8, 1978

DEPT. OF LAND UTILIZATION C & C HOHOLULU

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen:

Status Report No. 5 Puu Makakilo Quarry Conditional Use Farmit, Condition No. 5 of City Council Resolution No. 95

The following is Pacific Concrete's Status Report No. 5 on dust and replanting activities at Puu Makakilo.

En la company against the second of the seco During the past six months we received three complaints about dust from our quarry activities. Two of the complaints were legitimate. The other complaint was attributed to came burning. A summary of the complaints is as follows.

- The Department of Health's Pollution Investigation and Enforcement Branch called me on November 14, 1977 regarding a citizen's complaint that we were creating red dust at our upper site. The call was received at 9:25 a.m. A phone call to our Quarry Superintendent revealed that one of our two rented waterwagons had broken down that morning. Therefore, he could not suppress the dust from the overburden hauling. He agreed to stop the operation at 9:50 a.m.; however, they completed loading the last truck on top of the hill before 10:30 a.m.
- On December 1, 1977, I received a complaint from the Department of Health's PIEB on behalf of a Makakilo resident's complaint about clouds of heavy dust blowing across the H-1 freeway from our lower quarry site at 6:50 a.m. I told Bruce Tillman of the PIEB that I was at our lower site in the morning and that our quarry was clear. I saw heavy smoke from burning cane from a field adjacent to our quarry at around 8:45 a.m. The complainant called the police who visited our quarry site but found no dust problems.
- On March 29, 1978, we received a complaint at 12:40 p.m. about dust from our lower and upper quarry sites. I arrived at the lower quarry site at 1:20 p.m. and saw

dust being generated from our roads and crushers. Our waterwagon was parked on the lower site because the operator did not report to work. The wind was exceptionally gusty. Our operator had a minimum amount of water on the materials because his screens were badly clogged. I instructed all water turned on, and by 1:50 p.m. the dust from the crushers had subsided. I drove up to the upper site and witnessed two trucks being loaded with overburden at around 2:30 p.m. The waterwagon was spraying the material, and although there was some dust generated, I felt that it was under control and not a problem. There was some dust from the general area of the pit due to the very gusty trades.

Our heavy watering schedule coupled with a more normal rainfall pattern during the early part of this year has greatly reduced the visible emisions of dust from both our lower and upper sites

In regard to replanting activities at Makakilo, we completed the planting of 300 cleander plants along the lower quarry berm on Farrington Highway in March 1978.

Yours very truly,

Technical Services Director

MAY 1 2 1978

Dear Mr. Sekiya:

We look forward to your scattings occupation to soul coring your quarry operations. Your west report vill be due November 1978.

Very truly yours,

MILLIAM E. WANKET

WEW:st

co: Project Compliance Branch (Lorrie Chee) JUI 28 1978

Mr. Frederick K. Sakiya Technical Service: Director Pacific Concrete and Rock Co., Ltd. 2344 Panounui Drive Honolulu, Hawaii 96819

Dear Mr. Sekiya:

Subject : Conditional Use Permit for a Sanitary Dandfill and Quarry Operation
Location : Pun Natakilo, Honouliuli, Hawaii
Tax Map Key : 9-2-3: Por. 2: 9-1-15: Por. 4
File No. : 72/CUP-15(PCB)(JK)

Your May 8, 1978, status report regarding quarry operations at Puu Makakilo states that the planting of 300 cleander plants along the lower quarry berm on Farrington Highway was completed in March, 1978. The intent of the oleander planting was to provide visual screening of the finished quarry facility operations from Farrington Highway. A recent field check by a member of our staff revealed that a more intensive watering and maintenance program is needed to get the oleander to establish itself. We note that the quarry has been in operation since late 1973 and encourage your efforts to continue your planting activities along the lower quarry berm. Your cooperation is appreciated. Your next six-month report, due November, 1978, should bring us up-to-date on this activity.

Should you have any questions concerning this matter, feel free to contact Mr. Jon Kenney of our staff at 523-4256.

Descriptions

GEORGE S. MORIGUCHI Director of Land Utilization

GSM:sl

9-1-16: por 6, por. 4

MEMORANDUM TO FILE

mik: 9-2-63:7

FILE NO: 72 CUP 15

APPLICANT/OWNER: Bothe Concrete & Rock Wakakilo

Date May 31, 1978

quarry at Pu Makakilo Address: landfill at Pur Palailai

District: Makakilo

Approved By/Date: Ros 78-120/ Res: 45

Reviewed By: Kenney

COMPLIANCE WITH CONDITIONS: (Check one)

All Conditions met

Conditions NOT met. (List by number and explain circumstances of conditions not met.)

REMARKS:

field check for landscaping 7/18 Copies of Official EXHIBITS A" +" B" NOT in files.

NOTE: This CUP is covered by 2 concurrent resolutions. Resolution (94) refers to the Palailai Landfill, and has conditions of approval for such. Resolution 95 refers to the outer quarry operations and finish facilities base (batching, crushing etc.) and the conditions for approval of

TMK - 9-1-16: por 6 \$ 9-2-3: por. 12 for Land fill TMK-9-1-16: per 4 +9-2-3: por 2 for guarry operations

R-2

VIOLATION NOTICE:

FIELD visit: 1/18/78

obeander his not been established along the top of the beam along the finish facility on Farrington Huy. Thus, the operation has not been effectively screened from Farrington Huy.

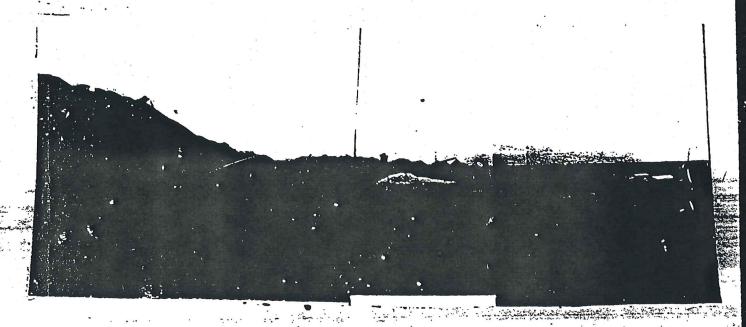
3/21/79 - FC revealed that there has been some improvement in the landscape maintenance.

There still is not sufficient = creening atop

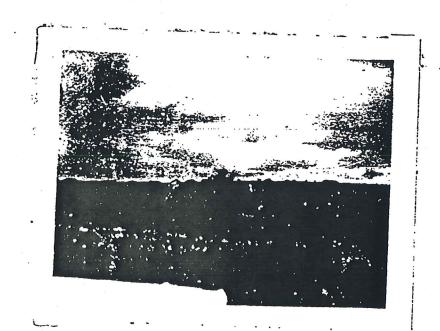
the berms.

Makaklo Quarry Ecific Concrete & Rock

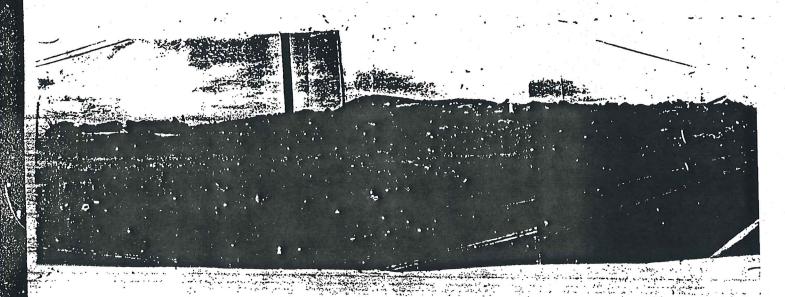
72CUP-15 July 18,1978



1) View towards Ewa (from just marka of Farrington Huy-maker of H-1) of the finish fricility area.



(2) View of the upper guarry site. Note dost generated by buildozer (control).



3 Haska view from Farang for they of the finish facility site with backing plant etc. Note the lack of oleander planting on the beam. Oleander is sparsely planted, but has not been established in order to provide adequate screening.

FIELD INVESTIGATION

Oct. 23, 1978

PHOTO NO. 1	ŗ
FILE NO. 72/201-15	
Location: Farnington they	1
Eux-Matatilo	
Tax Map Key: 9-2-3:6	
Description: View from	•
Farrington Hwy toward the	
busen loose used Note the	: 1
absence of deander screening	7
along the beam.	

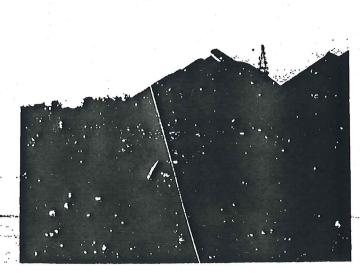
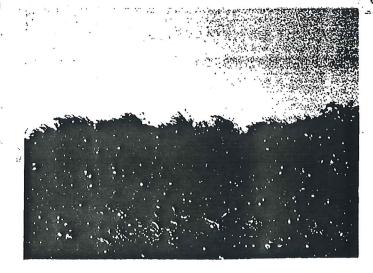


PHOTO NO. 2
FILE NO.
Location:
Tax Map Key:
Description: Same year as about
Again, no oleander is
MOWING



72/CUP-15(JK)

Mr. Frederick K. Seklya
Technical Services Director
Pacific Concrete and Rock Co., Ltd.
2344 Pahounni Drive
Honolulu, Hawaii 96819

Dear Mr. Sakiya:

Subject: Conditional Use Permit for a Sanitary
Landfill and Quarry Operation
Location: Pun Makakilo, Honouliuli, Hawaii
Tax Map Key: 9-2-3: pot: 2, 9-1-6; por: 4
Reference No.: 72/CUP-15 (PCB)

Your six-month status report due Lovember 8, 1978 has not been received. It should be forwarded as soon as possible.

Also, a recent field investigation conducted by a member of our staff revealed that the majority of the oleander along the lower quarry berm has died, and that the berm has been overrun by weeds.

The intent of the oleander screening was to provio isual screening of the quarry operations finishing facility from Farrington Highway. Your intentions for providing the required screening should be included in the report.

When writing to this department regarding this matter, please refer to the reference number in the subject heading. If you should have any questions regarding this matter, feel free to contact Mr. Jon Kenney or Mrs. Lorrie Chee of our staff at 523-4256.

Very truly yours,

WILLIAM E. WANKET Deputy Director

WEW:ra



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

TELEPHONE (808) 845-6441

8 . . 3:52 78 November 7, 1978

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen:

---Status-Report No. 6 Puu Makakilo Quarry Conditional Use Permit, Condition No. 5 of City Council Resolution No.95

The following is Facific Concrete's Status Report No. 6 on dust and replanting activities at Puu Makakilo.

We received two dust complaints at Makakilo during the past six (6) months. A summary of the complaints is as follows: Specification of the little will be a specific

I. The State Department of Health's PIE Branch gave us a notice of violation for visible fugitive dust emmissions across our property line on May 9, 1978. Mr. Bruce Tillman of the PIEB visited our quarry site on May 10, 1978 and confirmed that wind velocities that day were extraordinarily high. The wind was sweeping up under the stream of basalt #4 material at the end of the conveyor and picking up the dust. This aggregate contains about 10% minus 200 mesh material; therefore, we have water sprays throughout our conveying system to keep the dust down even on moderately heavy windy days. We agreed to shut down this operation on extremely windy days.

The second area of concern to Mr. Tillman was the loading of our concrete mixers. Again, our problem was the extremely high wind conditions which neutralized our fan induced draft system for dust collection. This system was observed to be sound and effective by members of both the PIEB and PTRB of the Department of Health on several occasions even with moderate wind conditions. Inasmuch as shutting this plant down would present an extreme economic hardship on Pacific Concrete, we proposed to redesign the system to increase the shroud area around the mixer hopper to provide a more tightly sealed enclosure. This work was finished and the system was judged to be acceptable by the PIEB.

2. A Makakilo resident, Mrs. Frank, called Pacific Concrete on July 20, 1978 to complain about dust from our stockpiles around noon. We believe that this call was unreasonable inasmuch as the whole area around Makakilo including open cane fields was being whipped up by winds gusting to 45 mph. We were under a Hurricane Alert in Honolulu at that time. However, we turned full water on our stockpiles and directed a heavy watering schedule for our water wagon that day. Fortunately, the winds began to die down on July 21, 1978.

Regarding replanting activites at Makakilo, we have recently retained a commercial landscape maintenance company to weed, irrigate and fertilize our plants on the upper and lower site berms. They have also been instructed to replace plants which have failed to establish themselves on the berms. New replanting activities have been centered around the employees lounge building on the upper quarry site with ground cover, Chinese Banyans and Bougainvillea shrubs.

Yours very truly,

Frederick K. Sekiya
Technical Services Director

central Files

LU11/78-5251(LC) 72/CUP-15

NOV 17 1978

Mr. Prederick K. Sekiya Technical Barvice Sirector Pacific Concrete & Rock Co., Ltd. 2344 Pahounui Drive Honolulu, Hawaii 96619

Dear Mr. Sekiya:

Status Report No. 6
Conditional Use Fermit - Pun Makakilo Gearry
Tax Map Key 9-231 por 2, 9-1-61 port,44

This is to acknowledge receipt and review of your status report required w condition No. 5 or Resolution No. 95 on the quarry operations.

We are pleased to note that a commercial landscape maintenance company has been retained to complete and maintain the landscaping of the upper and lower berms and the site. Not only will the landscaping add visual screening of the quarry and landfill operations, it should help to further minimize dust emissions.

Your cooperation is appreciated. Our staff will be periodically checking your progress on the landscaping program. The next status report is due May 8, 1979.

Please contact Mrs. Lorrie Chee of our staff at 523-4256 if you have any questions.

Very truly yours,

WILLIAM E. WANKET Deputy Director

WEW:ra





PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

RECEIVED.

TELEPHONE (808) 845-6441

7 周 8:36 May 4, 1979 '19 MAY

> DEPT. OF LAND UTILIZATION C & C HOHOLULU

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen:

Status Report No. 7 Pun Hokakilo Quarry Conditional Use Permit, Condition No. 5 of City Council Resolution No. 95

The following is Pacific Concrete and Rock Company, Limited's Status Report No. 7 on dust and replanting activities at Puu Makakilo.

We received three complaints about dust at Makakilo during the past six (6) months. A summary of the complaints is as follows: a supplied the supplied of the

- . We received a call from the Department of Health's Poliution Investigation and Enforcement Branch on December 21, 1978 regarding a citizen's complaint about red dirt blowing on the upper site. Winds were extremely gusty that day. We increased the watering schedule of our water wagon on the haul roads.
- The PIEB called me on January 3, 1979 about dust from the upper site. The operations in our normal rock quarrying activities were dust free. However, a separate red dirt loading and hauling operation subcontracted to Medeiros Trucking was creating dust from the red dirt road because their drivers were speeding at 25-30 mph. I spoke with the drivers and informed them that they were expected to observe the posted 10 mph speed limit in the quarry. I also instructed our water wagon operator to heavily water this road which was not part of his routine schedule. On January 5, 1979, the PIEB requested that I contact Mrs. Frank, a Makakilo resident about dust problems at Makakilo. Mrs. Frank had no specific complaint other than her windows and car are always coated with dust and that she feels it is from our quarry. I believe the January 3, and January 5 complaints originated from the same person and from the same incident.

3. On January 23, 1979, the PIEB called to inform me that they received a complaint from a Makakilo resident named Mrs. Casaban. She complained about dust at our lower quarry that morning. I called our quarry and was informed that our water line was cut by our construction crew that morning. I instructed our quarry supervisor to shut down operations immediately. The finishing plant was shut down at 10:30 a.m. I drove out to the plant and arrived at the quarry at 10:45 a.m. The upper and lower sites were clear of dust.

No replanting activities were scheduled for the past six month period. An inspection of the Oleanders on the lower site and Chinese Banyans on the upper site berm confirmed that the plants are healthy. The commercial maintenance company is still being retained by Pacific Concrete.

Yours very truly

FREDERICK K. SEKIYA

Technical Services Director

LU5/79-1712 (LC)

MAY 25 1979

Pacific Concrete and hook
Company, Littl
2344 Pahounul Drive
Bonolulu, Hawali 96819

Attention: Mr. Frederick K. Sekiya

Gentlemen:

Conditional Use Fermit - Pun Makakilo Querry Reference No. 72/CUF-15

Your Status report of Pay 3, 1977 has been received and raviewed.
Affirmative action taken on complaints about dust is acceptable.
Coordination with the bepartment of Realth's Pollution Investigation and Enforcement Branch is important.

Your efforts on the landscaping plans are acknowledged. Our staff will make periodic checks of the site in the near future.

The next status report is due in November 1979. When writing to the department regarding this permit, please refer to the reference number indicated above.

If you have any questions, please call Mrs. Lorrie Chee of our staff at 523-4256.

Very truly yours,

WILLIAM F. WANKET Deputy Director

WEW:ra

November 2, 1979

Department of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawali 96813

Gentlemen:

Status Report No. 8

Puu Makakilo Quarry

Conditional Use Permit, Condition 5 of

City Council Resolution No. 95

The following is Pacific Concrete and Rock Company, Limited's Status Report No. 8 on dust and replanting activities at our Pun Nakakilo Pacifity.

We received three complaints about dust at Makakilo during the past six months. A summary of the complaints is as follows:

- 1) We received a call from the Department of Health's Pollution Investigation and Enforcement Branch on May 21, 1979 about dust at both our upper and lower quarry sites. When I checked with our Quarry Supervisors, I was informed that both water wagons were down for repairs that day. We curtailed the bad operations and instructed drivers to slow down in the quarry. On May 23, 1979 we started a heavier watering schedule in the Quarry.
- 2) We received a complaint from the PIEB on June 26, 1979 about dust in the upper site before 8:00 AM only. I called our Quarry Supervisor who told me that the outside overburden subcontractor was starting at 6:30 AM and that our water wagons were not up the hill that early. We agreed to reschedule our watering to also take care of this early operation.

3) We received a dust complaint on August 13, 1979 from a Makakilo resident about dust from quarr_ roads. Both water wagons were temporarily down for repairs The state of that day.

Our replanting and plant maintenance activities at the lower and upper quarry sites were increased significantly the past six months. A systematic weeding operation on the lower site berm coupled with heavier watering and fertilization have resulted in very attractive and healthy Orleander shrubs. The Chinese Banyans on the upper site berm are also thriving due to our increased attention.

FREDERICK K. SEKIYA Technical Services Director

JAN 8 1980

Mr. Frederick K. Sakiya
rechnical Services Director
Pacific Concrete and Rock Co., Ltd.
2344 Pahounui Drive
Ronolulu, Hawaii y6819

Dear Mr. Sekiya

Conditional Use Permit Pun Makakilo Quarry - 72/CUP-15

We have no record of receipt of your six month status report due November 8, 1979. This report should be filed with our office as soon as possible.

This report will note affirmative action taken to comply with conditions of the permit including the following:

- 1. Observations of fugitive c.v.t;
- Report on replanting activities including the areas replanted and type of vegetation planted;
- 3. A report of citizen complaints relating to the operation of the quarry.

Your attention to the filing of this report is appreciated.

When writing to the department in regard to this permit, please refer to 72/CUP-15. Should you have any questions, please contact Bill McKinley at 523-4254.

Very truly yours,

ROBERT B. DUNCAN Deputy Director

RBD: ra



PACIFIC CONCRETE ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

RECEIVED

30 J. 15 8 TP EPHONE (808) 845-6441

111/80-166

DEFT. I LAND UTILIZATION C & C HENCLULU

January 11, 1980

Mr. Robert B. Duncan Deputy Director Dept. of Land Utilization City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Dear Mr. Duncan:

Re: _Conditional Use Permit Puu Makakilo Quarry - 72/CUP-15

We are in receipt of your letter of January 8, 1980 inquiring about our six-month status report due November, 1979. Enclosed is a copy of our report which was mailed on November 2. In the future we will use the above reference number.

Very truly yours,

FREDERICK K. SEKIYA

Technical Services Director

Inclosure



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAI! 96819

RECEIVED

TELEPHONE (808) 845-6441

'80 MAY 7 PM 1:16

May 5, 1980

DEPT. OF LAND UTILIZATION C & C HONOLULU

Department of Land
Utilization
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Gentlemen

Conditional Use Permit
Puu Makakilo Quarry - 72/CUP-15

The following is Pacific Concrete and Rock Company, Limited's Status Report No. 9 on dust and replanting activities at our Puu Makakilo Facility for the past six months.

We have not received a dust complaint from any private citizen or the Department of Health for the reporting period.

Our plant maintenance program is continuing to be successful. The Orleanders and Chinese Banyans appear to be thriving on both the lower and upper quarry sites.

Yours very truly

FREDERICK K. SEKIYA)
Technical Services Director

MAY 9 1980

Mr. Frederick K. Sellys
— inreal Services Director
Pacific Congrete and Rock Co., Ltd.
2344 Pahounul Drive
Honoluluy Hawaii 97819

The state of the s

Dear Mr. Sekiya:

Conditional Use Permit
Più Makakilo Quarry
Reference No. 72/CUP-15

Your status report of May 5, 1980 has been received, reviewed and accepted. Our staff will continue to make periodic checks of the site.

Your next status report is due in November 1980. When writing to the department regarding this permit, please refer to the reference number indicated above.

13 you have any questions, please call Mr. Allan Kuramoto of our staff at 523-4254.

Sincerely,

ROBERT B. DUNCAN Deputy Director

RBD: ra





PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 06819

RECEIVED

S All HELESPONE (808) 845-6441

:00 NO:

DEPT. OF LAND UTILIZATION C& CHONOLULU

November 3, 1980

Department of Land Utilization City and County of Honolulu 650 South King Street Hoholulu, Hawaii 96813

Gentlemen:

LU5/80-2067 (ICM) 72/CUP-15

The following is Pacific Concrete and Rock Company, Limited's Status Report No. 10 on dust and replanting activities at our Puu Makakilo Facility for the past six months.

We received seven dust complaints during this period. A summary of the complaints is as follows:

- On June 3, 1980, the Board of Health's Pollution Investigation and Enforcement Branch called us about a Makakilo resident's complaint about red dust from our quarry. I drove out to our quarry and inspected the facility. No dust was blowing across our property line. While inspecting the area I observed heavy red dust at the Mauka-Waianae corner of Makakilo Drive and Farrington Highway. The red dust from the cane harvesting operation was blowing directly to Makakilo City. Reported my observations to the PIEB who investigated the complaint further. On June 4, 1980, the PIEB called me to retract the complaint against PC&R.
- On June 23, 1980, the PIEB visited our quarry and noted that dust from three sources were visible.
 - Our concrete batch plant was emitting dust from the cement silo baghouse and mixer charging point.
 - The basalt #4 drop-off was dusty.
 - Dust from vehicular traffic was bad.

PC&R started a project to repair and modify the batching plant and increase our watering of the #4 conveyor and roads.

Department of I. d Utilization November 3, 1980 Page 2

- 3. On July 8, 1980, we received a complaint at 9:45 a.m. about dust from upper Makakilo. We blasted at 9:30 a.m. which creates dust but for a short instance only. We do not have a solution to prevent dust from blasting at this time.
- 4. On July 9, 1980, the PIEB did a follow-up of the June 23, 1980 inspection at our lower site. PC&R had not completed our repair and modification project at this time. We were issued a Notice of Violation for items 1 and 3 from the earlier complaint. The basalt #4 drop-off problem had been abated by heavier watering on the conveyors. We finally finished the modification of the concrete batching plant during the week of July 21, 1980. This source was visually inspected by PIEB inspectors several times and has not been a problem since the modifications were completed. PC&R instituted a larger, longer range project in improving our water loading system for our two water tankers which is still not completed at this date.
- 5. On July 25, 1980, the PIEB called about a dust complaint that occurred at 7:30 p.m., July 24, 1980, from our lower quarry.

 Dust evidently was from loading materials in our trucks. We could not confirm the problem in this instance.
- 6. On August 29, 1980, we received a complaint from the PIEB at 3:55 p.m. about dust from our lower quarry. Our quarry supervisor confirmed that we were having some problems with one water tanker being down that afternoon.
 - 7. On October 29, 1980, two people from the PIEB visited my office following a morning inspection at our upper quarry site. They noted our dusty operation at the primary crusher and informed me that a citation was forthcoming. I informed them that we were repairing broken PVC water lines and an electric eye solenoid valve to actuate water in the primary dump hopper that morning. I pointed out that we did not receive any complaint from this part of our operation during the past 2-3 years. In fact, our files show the last complaint from this source was on October 4, 1977 when the same water lines in the primary system had to be repaired. I drove out to Makakilo at 12:20 p.m. The primary crusher area was practically dust free with all water systems working except for some nozzles under our 7' standard crusher. A slight trail of white rock dust was visible from the C5 conveyor entrance under the crusher. This was an insignificant source in this system and was not visible from outside of our property. We will repair this part of the system, too. I called the PIEB who confirmed my observation later that same day.

Our landscaping efforts at the lower Makakilo site received a setback earlier this summer when a brush fire on Farrington

Department of band Utilization November 3, 1980 Page 3

Highway destroyed our PVC irrigation water lines for the Orleanders on the Waianae side of our scalehouse. The fire and lack of water destroyed most of the Orleanders on the berm in this area. The Honolulu side of the scalehouse was not affected and the Orleanders are healthy. PC&R has ordered 200 Mexican Cyprus plants for the area affected by the fire.

The Chinese Banyans on the upper site continue to thrive under our drip irrigation system.

Yours very truly,

FREDERICK K. SEKTY

Technical Services Director

cc: Mr. Samuel Keala, Jr.

72/CUP-15(SD)

NOV 12 1980

Mr. Frederick K. Sekiya
Technical Services Director
Pacific Concrate and Rock
Company, Limited
2344 Pahounui Utive
Honolulu, Hawali 96819

Dear Mr. Sekiya:

Conditional Use Permit No. 72/CUP-15
Puu Makakilo Quarry Facility
Tar Map Key 9-2-03

Your November 4, 1980 Status Report No. 10 on dust and replanting activities at the Pun Makakilo Quarry Facility has been accepted.

Our field investigation conducted on November 7, 1980 reveals a large barren area destroyed by fire. The PVC piping for irrigation of this area has been completely destroyed.

In a discussion with Mr. Kenneth Furakawa, Superintendent of Quarries at the Makakilo Facility, he stated that the 200 Mexican Cyprus plants ordered for the fire-affected area and replacement irrigation lines will be installed by May 1981. The Mexican Cyprus plants are hereby accepted as suitable replacements for the Oleanders destroyed by fire.

Please be advised that your next status report is due in May 1981. Should you have any questions, please contact Mr. Steve Dong of our staff at 523-1254.

Very truly yours,

Consold a. Clegg

Deputy Director

DAC:ra

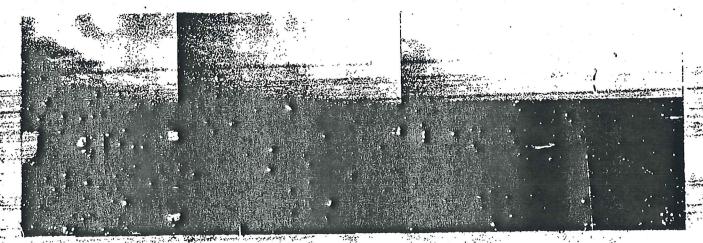
Permit Number: 72/cup-15

Tax Map Key :

Date: 11/07/80

Photograph A

LOCATION:



Photograph B

LOCATION:

MAKAKILO FACILITY.

DESCRIPTION:

FIRE DESTROYED PVC

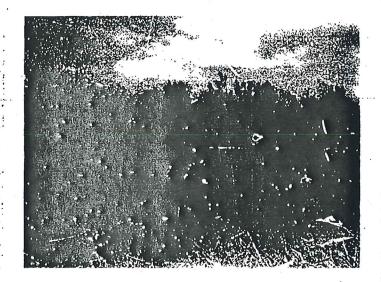
LANDSCAPING. NEW

PVC WILL BE INSTALLED

W/ LANDSCAPING BY

NEXT STATUS REPORT

(REPORT # 11)



Permit Number: 72/CUP-15

Tax Map Key

Date: 11/07/80

Photograph C

LOCATION:

MAKAKILO FACILITY

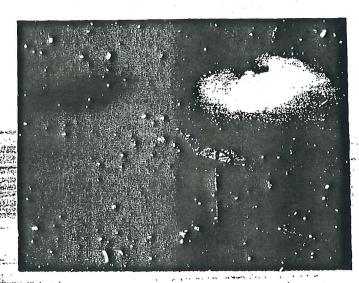
DESCRIPTION:

CONVEYOR & CRUSHED

ROCK - SUATE TRAIL

OF WALTE DUST

EMITTED ONLY

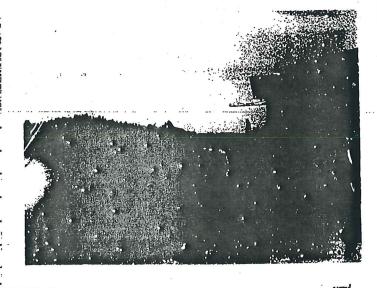


Photograph D

LOCATION:

DESCRIPTION

ROAD under continued watering to keep dust at a minimum.
Several water trucks
passed this point during the investigation
Oleanier in Background.





TRLEPHONE (808) 845-6441

March 30, 1981

Mr. Paul F. Aki, Chief Pollution Investigation and Enforcement Branch Hawail State Department of Health P. O. Box 3378 Konolulu, Hawaii 96801

Dear Mr. Aki:

Re: Docket No. EO-A-353 Pacific Concrete & Rock Co. , Ltd. The state of the s

This letter is to confirm our informal hearing of March 27, 1981. Attached is Pacific Concrete s indentification list of potential dust sources including comments on the history and present status of each point; PC&R's proposed corrective actions on sources identified as presently contributing to fugitive dust and the history of equipment expenditures and annual operating costs are also listed.

In addition, we will investigate the matter of dust complaints received for night shift operations at the lower quarry and the need for night shift supervision at this site.

The last increment of our proposed corrective work will be completed by May 15, 1981.

Yours very truly,

FREDERICK K. SEKIYA

Technical Services Director

Attachment

Identification and Comments Makakilo Quarry Potential Fugitive Dust Sources

. March 12, 1981

den a ser to the

Upper Quarry

- Overburden and landfill cover removal operations. The water truck keeps the loading area damp. loader operator is instructed to fill trucks carefully, dropping the materials from as low a height as is possible. Traffic speeds are continually monitored. Operation is stopped on windy days when wind speeds exceed 20 mph and dust is excessive.
- Drilling and blasting operations..... We will begin spraying a water mist into the drill holes during drilling. There is no practical way we know of to prevent dust at the instance when a blast occurs. We normally blast twice or three times a week. We will curtail blasting on extremely windy days.
- Pit operations and quarry haul roads. Dust emissions from pit operations and quarry haul roads have been successfully controlled by wetting of materials and roads with the water trucks.
- Primary dump hopper and jaw crusher. This operation is completely housed and a large Johnson-March water spray system controls the dust here. In over 2 years we have had one incidence of dust problem here on October 28-29, 1980 when the PVC water lines were broken. We should have repaired the system before operating.
- Scalping screens and conveyors. The scalping screens are housed and conveyor dropoff points are equipped with water sprays. We have not had problems with dust in this system.
- Secondary screens and 7' standard crusher. 6. The screens are housed and the crusher partially housed on the discharge end. Transfer points are controlled by water sprays. In over 2 years, we have had only one incidence of dust problem on October 28-29, 1980 when our PVC water lines were broken. We have further improved the water spray system in December, 1980 by the addition of a conflow automatic water spray control. We will add another conflow in this system in 1981.

B. Lower Quarry

- Transfer point between conveyor 5 to conveyor 6.

 This transfer point was modified in 1976-1977 to practically seal the transition point and control dust by a series of water sprays prior to the drop-off point and immediately after the drop. A conflow automatic control device was added to the system in late 1980. There have been no complaints here since the mod fication.
- 2. Drop-off point from radial stacker to "B" surge and S4C stockpiles.

 We had 3 complaints in October, 1980 from this source. The material is normally dampened in dust control measures further upstream from this point to adequately eliminate any visible dust from the drop-off point. The conflow water control system for transfer point C5 to C6 should preclude running dry materials through carelessness of the operator.
- 3. The storthead crushers and screening system.
 Water sprays under the two 4-1/4 shortheads will be relocated as originally engineered. The water will be actuated by a conflow automatic control system under conveyor Clo. In addition, another conflow will be installed in 1981 under conveyor C9 to control water at the transfer point between C9 and Clo. We received no official complaint from this source but feel that it is contributing to overall dust in the finishing area.
- The gyradisc crushers and screening system.

 This continues to be a major source of fugitive dust emission at Makakilo. We have redesigned the transfer chute feeding materials to the screens. Dust build-up on elevated wooden plank platforms contributes to dust by vibrations and winds. These planks will be completely replaced by grates in 1981. We will cover the screens with a canvas top and also will work on partial housing of the screens with corrugated aluminum sheeting. The water spray points under the crushers will also be relocated and actuated with a conflow control system already installed under conveyor C21 in late 1980.
- The trailer unit screens.

 The material screened here is usually dampened by sprays in the shorthead circuit. The screens are enclosed well and the #4 dust is contained in the structure. We have plywood covers on the top two screens and will replace both in 1981 due to about 5 years wear on both. We have not had a problem with dust here even though it is highly visible from the N-1 highway.

- 6. Number & conveyor drop-off.

 This used to be one of our worst sources for complaints.

 The radial stacker height was dropped one-half of the original height and a hood was installed at the drop-off point. Heavy watering is provided in the hood to thoroughly wet the material. Dust is observed only on the windiest days in the year.
- 7. Base course and select borrow stockpiles.

 The water sprays on the "B" material radial stacker has been adequate. We will further improve this point by installing a hood and water ring similar to the one on the number 4 conveyor drop-off point. This will enable us to put more water on the materials from our new water system which will give us more water output than our present source.
- 8. Material load-out into trucks and truck traffic.
 These sources continue to be a major contributor of dust. The water truck can adequately control fugitive dust from these sources if we can get more productivity from the unit. In order to increase productivity, we are building a 60,000-gallon truck loading system which will enable us to load 3,500 gallons in about 5 minutes at the lower quarry site. Our present city water source can load the water wagon in about 20-25 minutes. Our driver usually goes to Palailai to fill his truck which is slightly faster even with the round-trip travel time. We are also building a third spare water truck to be used whenever a truck is down for maintenance. Our records indicate that complaints have been received whenever the water truck was down.
- Concrete batching plant. The concrete batching plant used to be a major contributor of dust from three separate operations. The first was during loading of cement into the silo from suppliers' truck. The second was during charging of dry materials including cement into our concrete mixers and the third was during loading of aggregates into our receiving hopper with a front-end loader. The first two sources have been virtually controlled by installation of a large induced draft fan and baghouse to draw the dust through ducts from the points of emission into the baghouse. We have been trying to control the third source by wetting the materials in the stockpiles prior to loading and instructing the loader operator to drop the material into the hopper carefully. We have had very limited success with this procedure. In 1981 we will erect a metal frame and hood the hopper with a canvas shroud The hood will also to attempt to provide a windbreak. contain water sprays.

PACIFIC CONCRETE & JCK CO., LTD.

十分の方をかない。

Makakilo Quarry Dust Control Costs

March 12, 1981

	: 	1976		1980	1981	
		umulative	1977-1980	Cumulative	Planned	
A. Equipment Expenditures		TO Date	Add t tong	TO Date	Additions	
	Linkyan	5150.000		000 018	,	. ,
b. Rex Plant Addregate Hopper	محر دننگ و		1		\$ 2,500	
	F 7	8	1	1	2,000	
	-					
a. Johnson-March eystem inci. (pumps, tanes piping, no	nozzles)	50,000	\$ 83,000	133,000		
b. Conflow Authorite Control System for Wayer Sprays	[· · · · ·	3,900	3,900	1,300	5.50
TOTAL WORLD				2		
3. Concrete Batch Plant Induced Draft Fan and Baghou	onse		24,000	24,000	1	
4. Water Trucks	di dini		32,000	32,000	20,000	• :
5. Water Storage Tank and	in the second	en de la company	and the second s	l v Napi	47,000	•
		\$200,000	\$142,900	\$342,900	\$ 75,800	
annual Onerating Costs	1976	, 	1980		1980 (Est.)	
שייוותאד סלפדמכדות ספרים						
1. Operating Labor (Incl. 48% Fringes a. Plant & Yard Laborer b. Water Truck Drivers	ges) 10,000 (1/2-man)	\$ 44,460 (3	(1-1/2 men) \$ (2 men)	48,906 (1-1/2 men) 104,230 (3 men)	
2. Maintenance Labor	30,000	l man)	51,750 (1-1/2 men)	56,925 (1-1/2 men)	
 Materials, Hired Services (waste oil, water truck rental, chemicals) 	8,000	en	2,000		5,280	
	\$ 48,000		\$161,380	S	\$215,341) X
FKStac			100	Year		



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

RECEIVED

MAY 12 PHELEPHONE (808) 845-6441

May 8, 1981

DEPT. OF LAND UTILIZATION C & C HONOLULU

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen:

Conditional Use Permit - Puu Makakilo Quarry Reference No. 72/CUP-15

The following is Pacific Concrete's Status Report No. 11 on dust and replanting activities at our Puu Makakilo facility for the past six months.

We met with members of the State DOH's Pollution Investigation and Enforcement Branch on March 27, 1981 to detail and evaluate potential dust sources including comments on the history and present status of each point (see attachment) . Pacific Concrete's proposed corrective actions on sources identified as presently contributing to fugitive dust were explained (see attachment).

Our replanting activities at the lower site berm destroyed by fire have been set back. Over 90% of the 200 Mexican Cyprus plants purchased have died. We have purchased some Ironwood plants to see if they will survive. These are being grown in containers at a site in our upper Makakilo Quarry.

Very truly yours,

FREDÈRICK K. SEKIY

Technical Services Director

Attachment

cc: Samuel Keala, Jr.

LU5/81-2753 (JON) 72/CUP-15

MAY 21 1981

Proposition Beauty 98848

Dear Mr. Sekiyas

Conditional Use Parmit No. 72/CUP-15.

Your May 8, 1981 Status Report No. 11 has been received and accepted.

We acknowledge the fact that the Merican Cypress plants (approved by the Department of Land Utilization, November 12, 1980) proved to be an unsatisfactory replacement for the Oleander destroyed by fire. If the Ironwood, or any other plant type, is determined to be an acceptable substitute, please submit a request for Department of Land Utilization approval.

Should you have any questions concerning this matter, please contact Mr. John Nakagawa of our starf at 523-4254.

Sincerely, Tuelley

MICHAEL M. MCELROY

Director of Land Utilization

MMMiet



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819



RECEIVED

TELEPHONE (808) 845-644

'81 NOV 10 PM 1:57

November 9, 1981

DEPT. OF LAND UTILIZATION C & C HONCLULU

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Eawaii 96813

Gentlemen:

Conditional Use Permit
Puu Makakilo Quarry
Reference No. 72/CUP-15

The following is Pacific Concrete's Status Report No. 12 on dust and replanting activities at our Puu Makakilo facility for the past six months.

We received a complaint on May 22, 1981 about red dust from the upper Makakilo Quarry road area. Our investigation revealed that the sugar company dozers and trucks operating in an adjacent canefill was the cause of the dust. On June 25, 1981, we received a complaint about dust from the lower quarry night shift operation. Investigation showed that the cause for the dust was a temporary loader operator working on stockpile material not normally moved without a waterwagon wetting the stockpile. The operator was instructed on proper procedures.

The Chinese Banyan trees on the upper quarry berm and Oleander shrubs on the lower quarry berms are flourishing. Additional replanting activities are still pending.

Very truly yours,

FREDERICK K. SEKTYA

Technical Services Director

LU11/81-6074 (JDN) 72/CUP-15

Mr. Frederick K. Sekiya Facific Concrete and Rock Co., Ltd. 2344 Pahounui Drive Honolulu, Hawaii 96819

Dear Mr. Sekiya: Puu Makakilo Quarry

Conditional Use Permit No. 72/CUP-15

A site inspection was made on December 29, 1981 to monitor the landscaping and replanting efforts reported in your Status Report No. 12:

Landscaping was found to be acceptable, however, maintenance efforts should be increased. Overgrown bush was observed in several areas and should be removed.

Please keep us informed of your continued landscaping and replanting activities in your next report due in May 1982. Should you have any questions, please contact John Nakagawa of our staff at 523-4254.

Sincerely, Mk Dougall

MICHAEL M. MCELROY

Director of Land Utilization

MMM: et.



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

RECEIVED

TELEPHONE (808) 845-6441

4 PM 2:15

May 3, 1982

DEPT. OF LAND UTILIZATION C & C HONOLULL

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen:

Conditional Use Permit Puu Makakilo Quarry Reference No. 72/CUP-15

This letter is intended to serve as Pacific Concrete's Status Report No. 13 on dust and replanting activities at our Puu Makakilo facility for the past six months.

We are happy to report that no dust complaint was received by Pacific Concrete for the reporting period.

In regard to our replanting activities, all areas planted to date have been inspected today. Plants are now mature and thriving.

No new replanting activities are scheduled for the balance of the year due to adverse economic conditions.

Very truly yours,

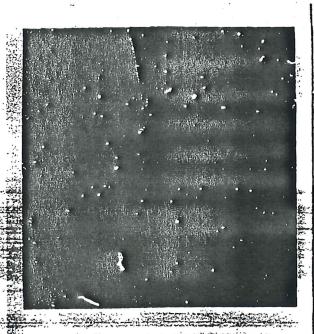
FREDERICK K. SEKIYA

Technical Services Director

MEMORANDUM TO FILE

Lee Sichter	Makakilo Quarry - Farrington Hgwy
Reviewed By	Address
File No:_	72/CUP-15
Tax Map Key : 9-1-6:por6;9-2-3:por 9-1-16:por4;9-2-3:por Approval Date: April 17, 1973	12 Applicant/Owner: Pacific Concrete & Rock Company 12 Issued By: City Council Res. 94 & 95 (Resolution, letter dated) By:
Amended .	
the same of the sa	Date: 8/31/82
The following conditions have comments: Review of file in response	ve not been met: (List)
	o on May 3, 1982 Letter indicates
that no dust complaints hav	e been received and that replanting coessful with no new replanting schedule
B. INSPECTION OF THE PREMISES, IN	veals: (Attach photos)
X All conditions are met	
The following conditions have Comments: Site check on Aug. 31, 1982	ve not been met: (List)
thriving and that despite n	ormal quarry operations dust levels
appear to be minimal	
Date(s) of inspection: 8/31/8	32
	rant extension of time, etc.)
X No action necessary schedule	e next monitoring for April, 83
Letter to Applicant	
Letter to Council	,
REMARKS: (Attach additional s	heets if necessary)
see photos attached	

. 1



SITE INSPECTION: 8/31/82

PHOTO #1: VIEW of QUARRY

FROM EWA JIBE LOOKING TOWARDS

KOOLAUS. VARIOUS PLANTIME

CLEARLY VISIBLE. NO DUST BEING

GWENTE! DESPITE MODIFIEL ACTIVITY.

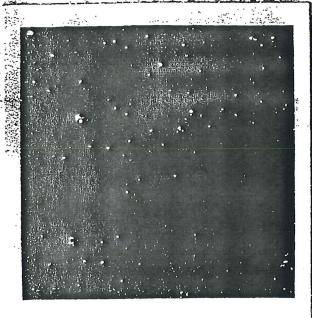


Photo \$2: SAME DIRECTION BUT Looking MORE MAKA! ADDITIONAL VIEW of VELLTATION...



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

TELEPHONE (808) 845-6441

C & C HOHOLUL

November 2, 1982

Department of Land, Utilization ... City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen: arrien lake a plane de la tella la como

> Conditional Use Permit Puu Makakilo Quarry Reference No. 72/CUP-15

This letter is intended to serve as Pacific Concrete's Status Report No. 14 on dust and replanting activities at our Puu Makakilo Facility for the past six months.

We received two dust complaints for this period on August 23, 1982 and again on September 9, 1982. On both occasions, the wind picked up considerably above normal conditions and operations were temporarily shut down for part of the day. Subsequent operating activities with an increased watering schedule satisfactorily controlled dust emissions.

In regard to our replanting activities, all planted areas are being maintained in a satisfactory condition. No new replanting activities have been scheduled for the near future due to adverse economic conditions.

Very truly yours

FREDERICK K. SEKTY

Technical Services Director

Technical Services Sirector Pact fit Concrete and Rock Co., Ltd.
2344 Pahounui Drive Honolulu, Hawaii 96819

Dear Mr. Sekiya:

Status Report No. 14.

Conditional Use Permit - 72/CUP-15

Pour Melkar Clo Querry

Case May Fayer 2 - 24 9 - 5 / port 44

This is to auknowledge receipt and review of your status report required by Condition No. 5 of Resolution No. 95 on the quarry operation.

Your report has been accepted and we are pleased to note your immediate response to complaints received as cited in your report. Periodic monitoring of your operation confirms that all plantings are being maintained in a satisfactory manner.

Your next scheduled report will be due in May 1983. Please contact Lee Sichter of our staff at 523-4254 if you have any questions.

Sincerely,

MICHAEL M. MCELROY

Director of Land Utilization

MMM:et



CIFIC CONCRE

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

TELEPHONE (808) 845-6441

May 5, 1983

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen:

Conditional Use Permit Puu Makakilo Quarry Reference No. 72/CUP-15

e to be a committee of the This letter is Pacific Concrete's Status Report No. 15 on dust and replanting activities at our Puu Makakilo Facility for the past six months.

We received one complaint about dust at lower Makakilo on April 14, 1983. Complainant called after lunch about observing dust early in the morning. Visited the site during the late afternoon and noted that the wind was very strong. However, increased watering on the ground and conveyors was controlling the dust. We had no further complaint from this incident.

In regard to replanting activities, all planted areas are being maintained satisfactorily. Indigenous plant growth have also flourished over previously bare soil areas.

Very truly yours,

Frederick K. Sekiya

Technical Services Director

Samuel L. Keala, Jr. The Estate of James Campbell

LU5/83-2131(EY) 72/CUP-15 72/SUP-1

Tabhical Services Director

Pacific Concrete and Rock

Company Limited

2344 Pahounui Drive

Honglulu, Hawaii 96819

Dear Mr. Bekiyas

Conditional Use Parmit (72/COP-15)
Electric Report No. 15 Dun Makakilo Quarry

Your status report of May 5, 1983 has been received and accepted. Our staff will continue to make periodic checks on the site.

Your next status report is due in November 1983, pursuant to Condition No. 5 of City Council Resolution No. 95.

Your efforts on the landscaping and maintenance of the planted areas are acknowledged, and also the affirmative action taken on the complaint about the dust situation at lower Makakilo on April 14, 1983.

When writing to the department regarding this permit, please refer to the reference number (72/CUP-15) indicated above.

We appreciate your cooperation in this matter. Should you have any questions, please contact Allan Kuramoto of my staff at 527-5379.

very truly yours,

Section Broken Sec.

MICHAEL M. McELROT Director of Land Utilization

MMM: jt

CC: CCA



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

Principal and the second

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII 96819

1983 NOV 10 PH 1: 55 TELEPHONE (808) 845-6441

CEPT, OF LAND UTILIZATION CITY & COUNTY OF PARTICULA

November 7, 1983

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gratlemen:

Conditional Use Permit Puu Makakilo Quarry Reference No. 72/CUP-15

This letter is Pacific Concrete's Status Report No. 16 on dust and replanting activities at our Puu Makakilo facility. for the past six months.

We received a dust complaint for lower Makakilo at around 12:00 noon on June 8, 1983. Complainant had no specifics except that she could see dust in the general area of our quarry from Makakiro I told her that I had just completed an inspection around 10:00 a.m. to 10:30 a.m. that very morning and found no significant dusty condition.

Resident in Makakilo compalined to our quarry supervisor about generally dusty conditions at our upper and lower \ quarry sites around 10:00 a.m., July 25, 1983. Our supervisor admitted that he was in a dry, dusty area in the pit and moved his pit operation to another area in the quarry.

Received complaint before lunch on August 12, 1983 from a Makakilo resident regarding dust at our upper Makakilo site. She claimed that we were not watering the haul road. Kenneth Furukawa, our quarry manager, informed me that we had a waterwagon but that our quarry is extra dry because of low rainfall this year. He stopped the operation at 1:22 p.m.

We received a complaint on August 29, 1983 at 12:00 noon about white dust blowing across the H-l Freeway. Mostly from wind blowing across open areas. Waterwagons were in operation that day.

-2- November 7, 1983

We received the fifth complaint of this reporting period on October 21, 1983 at 1:30 p.m. The complainant said that dust was blowing from the lower site across the H-1 Freeway. Windy condition that day was picking dust off our stockpiles and open areas. Waterwagons were in operation that day.

The record low rainfall on Oahu this year is generally causing a dustier condition from open terrain in and around our quarry areas than in prior years. However, we think it is noteworthy to mention that all five complaints appear to be from the same woman who refuses to give her name.

All planted areas are being satisfactorily maintained.
Indigenous plant growth continue to cover once bare soil
areas even in this unusually dry a ason.

A ... 2 - 2 ...

Very truly yours,

PREDERICK K

Technical Services Director

DEPARTMENT OF LAND UTILIZATION COUNTY OF HONOLULU AND 650 SOUTH KING STREET HONDLULU, HAWAII 96813 9 (808) 523-4432 EILEEN R. ANDERSON DIRECTOR ROBERT B. JONES ---72/CUP-15(长Y) NOV 23 1983 LU11/83-63%6 A TOS ASTORA DIVIDA DI ARTE, MA Mr. Frederick K. Sekiya Technical Services Director Pacific Concrete and Rock Company, Limited 2344 Pahounui Drive Honolulu, Hawaii 96819 Dear Mr. Sekiya: Status Report No. 16 Conditional Use Permit (72/COP-15) Puu Makakilo Quarry ; Tax Map Key 9-2-03: Portion of 2 and 9-1-06: Portion of 14 This is to acknowledge receipt and review of your Status Report No. 16 required by Condition No. 5 of City Council Resolution No. 95 (dated April 17, 1973) on the quarry operation. Your report has been accepted and we are pleased to note your immediate response to complaints received as cited in your report. All planted areas shall be satisfactorily maintained. Your next scheduled report will be due in May 1984. Very truly yours, Director of Land Utilization MMM:jt



PACIFIC CONCRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLIILU, HAWAII 96819

TELEPHONE (808) 845-6441

April 30, 1984

Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Gentlemen:

Conditional Use Permit Puu Makakilo Quarry Reference No. 72/CUP-15

المراز والمنافقة المراجعة المراجعة المراجعة This letter shall serve as Pacific Concrete's Status Report Number 17 on dust and replanting activities at our Puu Makakilo facility for the past six months.

We received a complaint from a Makakilo resident at 12:30 p.m. on February 21, 1984 regarding dust visible from the H-1 freeway. Reported complaint to Quarry Manager, Kenneth Furukawa who increased the water flow to our material sprays. No further complaint received.

We received a complaint on the afternoon of April 18, 1984 about dust blowing across the H-1 freeway from an alleged crusher at the Waianae end of cur lower quarry. I drove out to Makakilo to investigate because we do not have a crusher at the Waianae end of our lower quarry. However, I observed that there was dust being emitted from our Concrete batching plant while charging mixer trucks. Apparently some of the filter bags in our dust collector baghouse were either broken and/or plugged. I reported this to our Concrete Manager, Dexter Sakai, who assured me that the baghouse will be inspected and necessary actions taken to eliminate the dust. In further complaint received.

Regarding replanting activities, approximately 2000 linear feet of our boundary on Farrington Highway was planted with Oleander plants during this period. Drip irrigation lines

-2-

were also installed over this distance. This brings our planted and irrigated total to approximately 2400 linear feet on the berm alongside Farrington Highway and completes our planting program here. All previously planted areas in the lower and upper quarry sites have been maintained satisfactorily.

Very truly yours,

FREDERICK-K.-SEKLYA-

Technical Services Director

cc: Sam Keala, Jr.

LU5/84-2263 (EY) /72/CUP-15 72/SUP-1

Mr. Frederick K. Sekiya Technical Services Director Pagade Contrate and Rock Company: Clim Cod

2.64 Pahounuh Drive

2.0001ulu, Hawaii 96819 The state of the s

Dear Mr. Sekiya:

Conditional Use Permit (72/CUP-15) Status Report No. 17 (Dust and Replanting), Pur Wekaliko Order Tax Map Reys 9-1-16: 4 and 9-2-03: 2

Your status report of the land the letter the Your next status report in due in Movember 1984, pursuant to Condition No. 5 of City Council Resolution No. 95 (April 17, 1973).

Your efforts on the dust emission, landscaping and maintenance of the planted are are acknowledged, and also the affirmative action taken on the complaints about the dust situations at Puu Makakilo Quarry on February 21, 1984 and April 18, 1984.

When writing to the department regarding this permit, please refer to the reference numbers 72/CUP-15 and 72/SUP-1 indicated above.

We appreciate your cooperation in this matter. Should you have any questions, please contact Edmund Young of my staff at 527-6274.

> Very truly yours, Tuchaf. Tulling

MICHAEL M. MCELROY

Director of Land Utilization

MMM: it

cc: Planning Commission State Land Use Commission

State Department of Health

bcc: CCA



PACIFIC GONGRETE AND ROCK COMPANY, LIMITED

2344 PAHOUNUI DRIVE / HONOLULU, HAWAII \$6819

TELEPHONE (808) 845-6441

October 30, 1984

Department of Land Utilization
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Gentlemen:

Conditional Use Permit
Prop Makakilo Quarry
Reference No. 72/CUP-15

This letter is Pacific Concrete's Status Report Number 18
on dust and replanting activities at our Puu Makakilo
facility for the pastes x months:

We recorded only one dust complaint in this reporting period. On May 3, 1984, we receive a 21 from a Makak 10 resident at around 2) M5 pane reporting finit white dust from drilling and red dust from our upper site was visible. I drove up to the top of the Makakilo Townhouses at around 3:45 p.m. I saw no dust of either color visible anywhere. I then spoke with our Quarry Supervisor, M. Toyama and Quarry Manager, K. Furukawa about their observations that day. Both men reported that our quarry operation was not dusty on that particular day. While driving up to the upper quarry site, I noticed the cane field on the Honolulu side of our quarry was emitting swirls of red dust.

In regard to replanting activities, no new areas were planted in the last six months. Previously planted vegetation in both the upper and lower quarry sites are being satisfactorily maintained. Plant growth has been steady under our drip irrigation system.

Yours very truly,

FREDERICK K. SEKTYA

Technical Services Director

cc: Samuel I. Keala, Jr.

NOV 1 9 1984

LU11/84-5633 (WE) 72/CUP-15 72/SUP-1

Zr. Prederick K. Beklyk
Technical Services Director
Tacific Concrete and Book
Company, Timited
2344 Pahounui Drive
Honolulu, Hawaii 96819

Dear Mr. Sekiyas

Conditional Use Persit (72/cor-15)
Statis No. ort No. 187 (Dust and
Discrete No. orters
200 No.

This is to acknowledge receipt and review of your Status Report No. 12, as required by Condition No. 5 of City Council Resolution No. 95 (dated April 17, 1973) on the quarry operation.

Your report has been accepted and we are pleased to note your immediate response to the complaint received as cited in your report.

Your next scheduled report is due in May 1985.

Very truly yours,

Tuchal. The Elian

MICHAEL M. MCELRO! Director of Land Utilization

MMM: jt

cc: Planning Commission State Land Use Commission State Department of Health

bcc: CCA

Grace Pacific ORPORATION



THE CONCRETE & ROCK DIVISION / 2344 Pahounui Drive / Honolulu, Hawaii 96819 / (808) 845-6441 THE PAVING DIVISION / P.O. Box 78 / Honoluiu, Hawaii 96810 / (808) 487-7916

April 30, 1985

APR 3 0 1985

Department of Land Utilization City & County of Honolulu 650 S. King St. Honolulu, Hawaii 96813

DEPARTMENT OF LAND UTILIZATION City and Couldy of Monolulu (") South King Street Honelulu, Hawaii 98313

Gentlemen:

SUBJECT: Conditional Use Fermit Puu Makakilo Quarry Reference No. 72/CUP-15

This letter is GracePacific Corporation's Status Report Number 19 on dust and replanting activities at our Puu Makakilo facility for the past six months.

We did not have any dust complaints during this period.

In regard to replanting activities, no new areas were planted in the last six months. Previously planted vegetation in both the upper and lower quarry sites are being satisfactorily maintained. Plant growth has been steady.

Yours very truly,

THE CONCRETE & ROCK DIVISION

Melvin G. L. Tom Safety and Environmental Specialist

MGLT/eb

cc: Samuel L. Keala, Jr.

May 7, 1985

Department of Land Utilization City & County of Honolulu 650 S. King Street Honolulu, HI 96813

Attention: Mr. Henry Eng

Subject: Puu Makakilo

Gentlemen:

Reference is made to subject conditional use permit. Pacific Concrete & Rock Co., Ltd., recently underwent a corporate name change. This is to inform you that Pacific Concrete is now known as GracePacific Corporation, The Concrete & Rock Division.

Our new mailing address effective June 1, 1985 will be:

P. O. Box 78 Honolulu, HI 9610

Very truly yours;

The Concrete & Rok Division

E. W. McCurdy Vice President an General Manager ◆ FEB 15 '96 Ø8:54HM GKHUL PHUIFIU

CONDITIONAL USE PERMIT Pu'u Makakilo Quarry, 72/CUP-15

Post-it" Fax Note	7871	Date 2/45/94 pages 3
TO B 08	C.,	From JON
Co./Dept.	The s	ou Kenuder
Phone #		Phone #
Fax #		Fax#

Report Dates

Report

January 18, 1990

Received 2 complaints from a local resident for lower Makakilo area on dust blowing across freeway.

June 20, 1990

Jan. 29th received a call from a Makakilo resident stating that dust was blowing across the freeway.

Jun. 14th received a call from a Makakilo resident stating that dust was blowing across the freeway. It was a high wind day and we sprayed the grounds with water.

February 1, 1991

Jun. 21st received a call from a Makakilo resident. She was passing our quarry and noticed more dust coming from our area than she had in a long time. We informed her that we were aware of this problem because the water pipe had broken and we were fixing it.

January 28, 1992

There were no complaints in the past year. We made modifications to our sprinkler systems and paved parts of our facility.

February 22, 1993

Jun. 13th Mrs. Daniels (Makakilo resident) called and told us our dozer was making dust and that she could see it from the freeway. We stopped operating that dozer.

Jun, 16th Mrs. Loma Kaiwi (Makakilo resident) said that dust was going into her home and that it was coming from our upper quarry and golf course area.

Jun. 18th Mrs. Yamada reported that in the past few days they started getting a lot more dust.

Jun. 29th a Makakilo resident stated that they could see dust coming from our quarry.

Jun. 30th a Makakilo resident stated that they could see dust coming from our quarry.

Jul 21st a State Inspector visited us and told us that the upper quarry was very dusty and we sprayed the area.

Jul 30th a State Inspector reported that there were dust on the roadways so we watered the roads.

Aug. 5th a Kathy and Mr. Tam called and said she could see dust coming from our lower and upper quarries. We sprayed the areas.

Aug. 7th a State Inspector visited and stated that the dust was under control.

Aug. 28th a State Inspector came by and said everything was okay.

Aug. 31st someone called and said the dust is blowing across the freeway.

Oct. 23rd a Makakilo resident said that dust was going up to her home from the lower quarry. It was a windy day and we sprayed the areas more frequently.

Nov. 16th Mr. Lee of the Clean Air Branch said that he was informed on Sunday that there was a big dust cloud from our golf course area.

September 8, 1993

Mar. 31st a motorist passing our quarry noticed dust in our area. We sprayed extra water on the stockpiles.

Apr. 1st a motorist stated that she was heading towards town and saw dust coming from our quarry, we sprayed the stockpiles.

Apr. 5th Mr. Tam of the Clean Air Branch said he received a call from a motorist passing our quarry. We increased the water on the spray bars and sprayed the stockpiles.

Apr. 6th Mr. Tam did a spot inspection of our facilities and informed him of our efforts in minimizing dust emissions.

Jun. 2nd a motorist called the Board of Health who called us and stated that dust was coming from our quarry. Jill Stenrud of the Clean Air Branch did a follow-up visit to review the dust containment efforts.

Jun. 23rd a motorist stated that dust was coming from our quarry. We had low water pressure that day and it was hot and windy.

February 22, 1994

No complaints since our last report.

Page 3
Conditional Use Permit

September 9, 1994

Aug. 8th Jill Stensrud from the Clean Air Branch informed us that they received a complaint this morning but was not specific as to where the dust was coming from. We could not locate where the dust was coming from.

March 8, 1995

No complaints since our last report. Jill Stensrud inspected our sites and reported no problems.

January 17, 1996

Apr. 19th someone called the Board of Health who in turn called us to report dust coming from our lower quarry. We were aware of the situation and was taking action to contain the dust.

May 11th Jill Stensrud from the Clean Air Branch called because someone was driving by and could see dust coming from our lower quarry. We took action to remedy the situation.

סבר מנ . מז מזיסמנוו פעערב בערזנור ב וועג

GracePacific



P.O Bux TE Horsoitile Hawall 96810 • (808) 487-7916 • (808) 672-3545 FAX (808) 486-8025

July 10, 1996

Department of Land Utilization City & County of Honolulu 650 South King St. Honolulu, HI 96813 Attn: Mr. William Enriques

Subject:

Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Gentlemen:

This is Grace Pacific's status report on dust and replanting activities at our Pu'u Makakilo facility for the past six months:

We have been experimenting with a water additive which helps to minimize dust emissions. It seems to be an effective supplement to our dust prevention activities.

On May 15, 1996, the Board of Health came by to inform us they received an anonymous call complaining of dust and noise during our paving department's night operation. We informed our paving department about the complaint and they took actions to minimize the dust and noise exposure.

The Dust Control Log system we implemented continues to allow us to effectively minimize the emission of dust. Throughout this time period, we continued installing dust prevention spray bars, screen and chute covers.

The wiliwili and oleander trees alongside our lower quarry and the wiliwili trees at our upper quarry continue to grow.

Sincerely,

Jon S. Shiraki

Vice President-Operations

cc: Campbell Estates



31460



P.O. B

10 100B C.

) • (808) 487-7916 • (808) 672-3545 FAX (808) 486-8025

November 30, 1998

Department of Land Utilization City & County of Honolulu 650 South King St. Honolulu, HI 96813 Attn: Mr. William Enriques

Subject:

Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Gentlemen:

This is Grace Pacific's status report on dust and replanting activities at our Pu'u Makakilo facility for the past twelve months:

We received one dust complaint from Mrs. Linda Daniels, on March 13^h via the neighborhood board chairperson Ms. Maeda Timson. Mrs. Daniels stated that while at the intersection of Kapolei Shopping Center the evening of March 10th, she was looking Waipahu-bound and noticed the street light on with dust being generated. Since we were not operating the quarry, we determined that perhaps she was witnessing the steam coming out of our asphalt plant.

Mrs. Daniels also called Representative Mark Moses and told her what she witnessed. She indicated to him that we were purposely not watering down the material on the conveyors because we don't want to pay for water. We told Rep. Moses that we water our material on the conveyors and make every effort to ensure that our dust emission is minimized.

The Dust Control Log system we implemented continues to allow us to effectively monitor the emission of dust which ultimately contributes to the minimizing of dust. Throughout this time period, we continued installing dust prevention spray bars, screen and chute covers, and continue to monitor their effectiveness.

The wiliwili and oleander trees alongside our lower quarry and the wiliwili trees at our upper quarry continue to grow.

Refing plust

R. P. Singlehurst

Vice President-Quarry Operations

cc: Campbell Estates

"An Equal Employment Opportunity Employer"



Administrative Office Paving Office Quarry Office (808) 674-8383 (808) 441-0650 (808) 672-3545 fax (808) 674-1040 fax (808) 441-0651 fax (808) 672-3998



September 10, 2001

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, HI 96813 Attn: Mr. Randall Fujiki

Subject:

Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Mr. Fujiki:

This is Grace Pacific's status report on dust and replanting activities at our Pu'u Makakilo facility.

Due to the Kapolei Knolls development on the Wai'anae Side of our lower quarry, we have installed an entire line of wili-wili trees along our property line, as well as a more elaborate sprinkler system and a water canon. This water canon sprays over a large area at the Western end of our property during the weekend to help minimize any stray dust occurring when not in operation.

Recently, we replanted oleander trees along the front of our property due to its destruction due to a brush fire. A new sprinkler system was also installed.

The Dust Control Log system we implemented continues to allow us to effectively monitor the emission of dust that ultimately contributes to the minimizing of dust. Throughout this time period, we continued installing dust prevention fogger systems, screen and chute covers, and continue to monitor their effectiveness.

Sincerely

R. P. Singlehurs

Vice President Quarry Operations

a lehun A

cc:

Campbell Estates

R. Creps

March 13, 2002

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813 Attn: Mr. Randall Fujiki

Subject:

Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Mr. Fujiki:

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report September 10, 2001.

We continue to experiment with a water additive which helps to minimize dust emissions, it is an effective supplement to our dust prevention activities.

There were no reports of dust complaints to our office.

The wiliwili and oleander trees alongside our lower quarry and the wiliwili trees at our upper quarry continue to grow.

Sincerely,

R. P. Singlehurst Vice President-Quarry Operations

Cc: Campbell Estates

September 9, 2002

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813 Attn: Mr. Randall Fujiki

Subject:

Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Mr. Fujiki:

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report March 13, 2002.

There were no reports of dust complaints to our office. We continue to maintain extreme vigilance on our dust control suppression activities.

The wiliwili and oleander trees alongside our lower quarry and the wiliwili trees at our upper quarry continue to grow. At the lower quarry, along side of Farrington Highway a new landscaping program has been implemented for dust control and aesthetics.

Sincerely,

R. P. Singlehurst Vice President-Quarry Operations

Copy: Campbell Estates

March 14, 2003

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Sirs,

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report of September 9, 2002.

There have been no reports of fugitive dust received by our office from either our neighbors or the Clean Air Branch. We continue to maintain vigilance on our dust control suppression activities.

We are continuing to maintain the banyan trees screening our upper quarry from view along the H-1 freeway. Recent visual mitigation activities for the lower quarry include the clearing of the setback area between Farrington Highway and the quarry property, the planting of grass on the setback area, and the planting of wedelia and oleander on the berm above the setback area. To mitigate the view of the lower quarry from the H-1 freeway, we have requested permission from the State to fill in the missing oleanders and install an irrigation system.

Sincerely,

R. P. Singlehurst Vice President-Quarry Operations

Copy: Thomas Heiden, Campbell Estate

September 29, 2003

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Sirs,

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report of March 14, 2003.

July 1, 2003 a Clean Air Branch inspector of DOH inspected the facility due to a dust complaint from a near by homeowner. It was determined that dust was coming from construction activity South East of the Lower Quarry across Farrington Highway. We continue to maintain vigilance on our dust control suppression activities.

We are continuing to maintain the banyan trees screening our upper quarry from view along the H-1 freeway. Current visual mitigation activities for the lower quarry include the maintaining of the setback area between Farrington Highway and the quarry property, the planting of grass on the setback area, and the planting of wedelia and oleander on the berm above the setback area. To mitigate the view of the lower quarry from the H-1 freeway, we are requesting permission from the State to fill in the missing oleanders and install an irrigation system.

Sincerely,

Christopher Steele Manager Environmental Compliance

Copy: Thomas Heiden, Campbell Estate

September 28, 2004

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Sirs,

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report of March 30, 2004.

May 12, 2004 and May 24, 2004 a Clean Air Branch inspector of DOH inspected the facility due to dust complaints from Kapolei Knolls and Makakilo.

Based on the results of the inspections it was concluded that all was in order and all necessary actions to prevent fugitive dust was being done.

We are continuing to maintain the banyan trees screening our upper quarry from view along the H-1 freeway. Current visual mitigation activities for the lower quarry include the maintaining of the setback area between Farrington Highway and the quarry property, the planting of grass on the setback area, and the planting of wedelia and oleander on the berm above the setback area. To mitigate the view of the lower quarry from the H-1 freeway, our project to plant the missing oleanders and install an irrigation system along the freeway had been completed and is being maintained.

Another project that has also begun is creating a buffer between the West side of the Lower Quarry and Kapolei Knolls. This buffer has been planted in grass and is being maintained.

Sincerely,

Christopher Steele Manager Environmental Compliance

Copy: Campbell Estate

March 9, 2005

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Sirs,

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report of March 30, 2004.

GPC has not received any complaints within this reporting period.

Current visual mitigation activities for the lower quarry include the maintaining of the setback area between Farrington Highway and the quarry property, the planting of grass on the setback area, and the planting of wedelia and oleander on the berm above the setback area. To mitigate the view of the lower quarry from the H-1 freeway, oleanders have been install an irrigation system along the freeway has also been completed

Another project that has also begun is creating a buffer between the West side of the Lower Quarry and Kapolei Knolls. This buffer will be planted in grass.

Sincerely,

Christopher Steele Manager Environmental Compliance

Copy: Campbell Estate

September 29, 2005

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Sirs,

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report of March 2005.

In this reporting period the facility has not had any complaints or visits from the Department of Health.

To mitigate the view of the lower quarry from the H-1 freeway, we have planted oleanders and installed an irrigation system along the freeway had has been completed and is being maintained.

On going project that has also is creating a buffer between the West side of the Lower Quarry and Kapolei Knolls. This buffer has been planted in grass and is being maintained a chain link fence will also be constructed for security along the border of GP and Kapolei Knolls.

Sincerely,

Christopher Steele Manager Environmental Compliance

Copy: Campbell Estate



Administrative Office (808) 674-8383 Paving Office Quarry Office

(808) 845-3991 (808) 672-3545 fax (808) 674-1040 fax (808) 842-3206 fax (808) 672-3998



March 31, 2006

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Sirs,

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report of September 28, 2005.

In this reporting period the facility has not had any complaints or visits from the Department of Health.

To mitigate the view of the lower quarry from the H-1 freeway, we have planted more oleanders and modified irrigation system along the freeway had has been completed and is being maintained.

On going project that has also is creating a buffer between the West side of the Lower Quarry and Kapolei Knolls. This buffer has been planted in grass and is being maintained. A new chain link fence was also constructed on the property line with Kapolei Knolls to reduce the visual affect and reduce noise. We are having trouble with the Wili Wili trees due to affect from the wasp

Sincerely,

Christopher Steele

Manager Environmental Compliance

Copy: Campbell Estate Peter Gibson



Administrative Office Paving Office Quarry Office (808) 674-8383 (808) 845-3991 (808) 672-3545 fax (808) 674-1040 fax (808) 842-3206 fax (808) 672-3998



September 29, 2006

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Co

Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear DPP:

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report o March 3, 2006.

In this reporting period the facility had one noise complaint from a homeowner across the lower quar on Farrington Highway. As a result, we conducted a noise study in coordination with the DOH Nois Branch. The test results indicated that we are in compliance and continue to work with the homeowr on any concerns relating to our facility.

To mitigate the view of the lower quarry from the H-1 freeway, we planted more oleanders and modified the irrigation system along the freeway. This has been completed and is being maintained.

The buffer between the west-side of the lower quarry and the Kapolei Knolls development continues move forward. Grass has been installed and is being maintained. A new chain link fence was constructed along with planting oleanders between the property line of Kapolei Knolls and Grace Pacific to reduce the visual and noise affect.

We, along with everyone else on the island, are having trouble with the wiliwili trees due to the invasion of the wasps. Dust monitors and a weather station have been installed to provide continual readings that allow Grace Pacific to take our dust control measures up to a new level. We are also in the process of putting in place a facility wide "Dust Control BMP" which will be our personal commitment to the DOH of our commitment to doing everything possible to be the best neighbor as possible.

hristopher

Manager Environmental Compliance

Copy: Campbell Estate Peter Gibson March 30, 2007

Department of Planning & Permitting City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Subject: Conditional Use Permit, Pu'u Makakilo Quarry, 72/CUP-15

Dear Sirs,

This is Grace Pacific's status report for activities at our Pu'u Makakilo facility since our last report of September, 2006.

In this reporting period we have had noise complaints from one home owner across Farrington Highway. We have been working in collaboration with the Department of Health Noise folks and our noise consultant. We are in compliance to the HAR rules for noise levels at our property line, but we are being pro active by setting up a noise meter at the lower quarry location to get an idea of 2 things, one being getting a base line data stream and two to try to find out what type of noise the home owner is hearing.

The oleanders we planted along H-1 and modified irrigation system are working and growing very well.

The Lower Quarry West side buffer is almost completed just a little more work need to be done on the Farrington Highway side of the buffer. The Banyan trees are taking nicely and growing. All the Wili Wili trees have died and we are planting a replacement for it, but will take time to really do any good.

Grace Pacific would appreciate a response letter from your office.

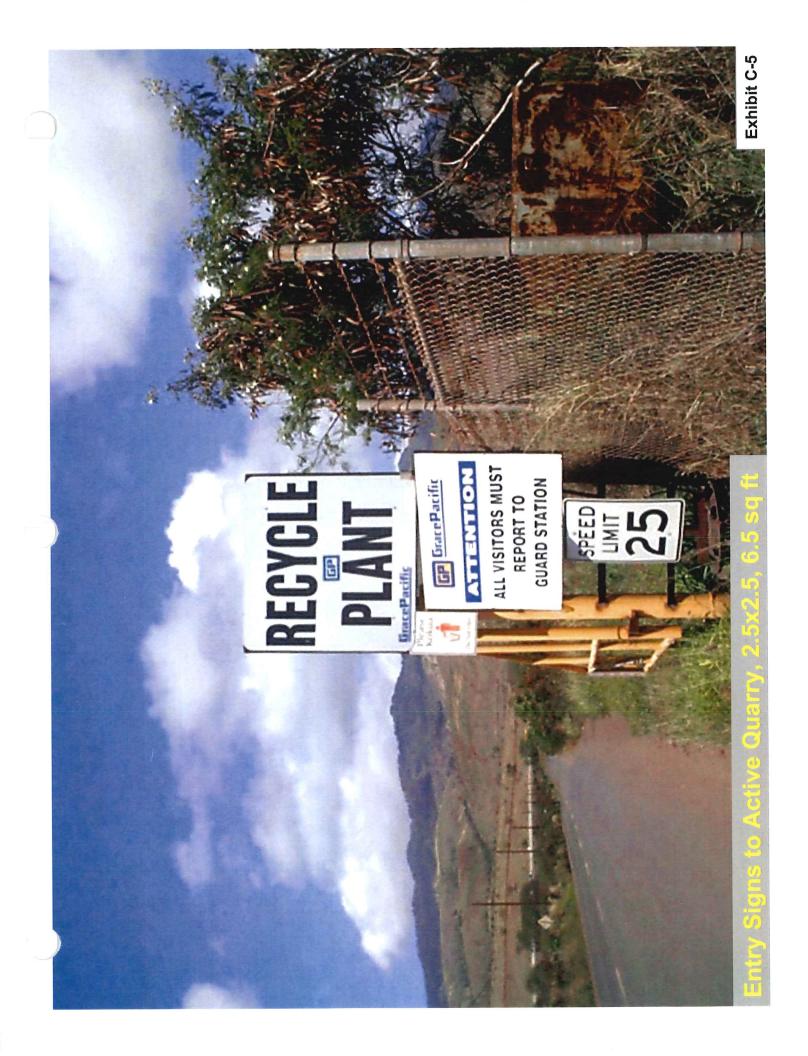
Sincerely,

Christopher Steele Manager Environmental Compliance

Copy: Campbell Estate Peter Gibson C-4









DEPARTMENT OF PLANNING AND PERMITTING CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6743 • INTERNET: www.co.honolulu.hi.us

JEREMY HARRIS



RANDALL K. FUJIKI, AIA

LORETTA K.C. CHEE DEPUTY DIRECTOR

(JP)

September 13, 2002

Mr. Gene Yong Belt Collins Hawaii 2153 North King Street, Suite 200 Honolulu, Hawaii 96819

Dear Mr. Yong:

Request : Zoning Variance No. 2002/VAR-51

Applicant : Grace Pacific Corporation

Agent : Belt Collins Hawaii

Landowner : James Campbell Trust Estate

Location : 91-920 Farrington Highway - Makakilo

Tax Map Key: 9-1-16: 4 and 9-2-3: 82

The Director of Planning and Permitting has <u>APPROVED</u> the above variance, subject to certain conditions. A copy of the Director's Findings of Fact, Conclusions of Law, and Decision and Order, including the conditions of approval, is attached.

NOTE: If the variance conditions contain time limits, the applicant is responsible for complying within those time limits, or the variance will lapse. If the variance is "after-the-fact", and it lapses because of failure to comply with the conditions, the applicant will be in violation of the zoning code and subject to enforcement proceedings. A new application for the same variance will not be accepted within 12 months of the lapse date.

This variance is limited to those sections of the Land Use Ordinance stated in the Findings of Fact and/or Decision and Order; and shall not be construed as approval of any other permit or review by the Department of Planning and Permitting or by any other agency.

Any party (to the case) wishing to appeal the Director's action must submit a written petition to the Zoning Board of Appeals (ZBA) within 30 calendar days from the date of mailing or personal service of the Director's written decision. (Zoning

Mr. Gene Yong Page 2 September 13, 2002

Board of Appeals Rules Relating to Procedure for Appeals, Rule 22-2, <u>Mandatory Appeal Filing Deadline</u>). Essentially, the Zoning Board of Appeals rules require that a petitioner show that the Director based his action on an erroneous finding of a material fact, and/or that the Director acted in an arbitrary or capricious manner, or manifestly abused his discretion. Generally, the ZBA can only consider the evidence previously presented to the Director of Planning and Permitting.

Failure to comply with ZBA Rules Chapter 22, <u>Procedure for Appeals</u>, may result in the dismissal of the appeal. Copies of the ZBA rules are available at the Department of Planning and Permitting. Appeals should be addressed to:

Zoning Board of Appeals c/o Department of Planning and Permitting 650 South King Street Honolulu, Hawaii 96813

If you have any questions or need additional information concerning this variance, please contact Jamie Peirson of our staff at 527-5754.

Sincerely yours,

RANDALL K. FUJIKI, AID Director of Flanking and Permitting

RKF:nt

Enclosure

CC: Grace Pacific Corporation
Herman Young
Christine Amii
DBEDT, ERT Division
(Attn. Maurice H. Kaya)

POSSE Doc. No. 171411

DEPARTMENT OF PLANNING AND PERMITTING OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

IN THE MATTER OF THE APPLICATION)

OF

GRACE PACIFIC CORPORATION

FOR A VARIANCE

I certify that this is a full, true and correct copy of the original document on file with the Department of Planning and Permitting, City and County of Honolulu.

9.13.07

.FILE NO. 2002/VAR-51

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER

I. APPLICATION

A. Basic Information

APPLICANT:

Grace Pacific Corporation

LANDOWNER:

James Campbell Trust Estate

AGENT:

Belt Collins Hawaii (Gene Yong)

LOCATION:

91-920 Farrington Highway - Makakilo

TAX MAP KEY:

9-1-16: 4 and 9-2-3: 82

LAND AREA:

229.556 Acres

ZONING:

AG-1 Restricted Agricultural and AG-2 General

Agricultural Districts

The Department of Planning and Permitting (DPP) held a public hearing on August 8, 2002 to consider the application. The applicant and all other interested persons present were given an opportunity to be heard. The record of the hearing is on file with the Department.

Mailed SEP 1 3 2002

Date

B. <u>Proposal</u>: To allow a general "manufacturing and processing establishment" (an asphalt and concrete recycling facility in the Makakilo Quarry), which is not a permitted use in agricultural districts. The existing quarry operates under a valid conditional use permit (CUP).

The applicant proposes to expand the quarry operation ("resource extraction") by importing off-site construction material. The recycling operation will process about 100,000 tons of material per year. This is equivalent to about 10 percent of the material currently excavated by the quarry. The CUP for the quarry does not authorize the applicant to recycle construction material or debris. And, given the large scale of the planned recycling operation, it cannot be considered an accessory use.

Typical recyclable material would include cold-planed asphalt, roadway foundation material and clean Portland cement concrete from demolished roadways, buildings, and other structures. This material would be processed within the "upper quarry" portion of the site as recycled rock and aggregate to be used for road materials or to be blended with excavated material in the production of concrete. See Exhibit A-3. The same equipment and facilities used for the on-site quarry material would be used for the imported material. See Exhibits C-10 through C-12. Stockpiling and production of "B" grade material will be relocated to the upper quarry. A 900- to 1,050-square foot (approximate) scale facility will be built to weigh incoming loads of construction material. See Exhibits A-7, B-1 and B-2, and C-9. The equipment to process (separate, crush and screen) recycled material will be located exclusively within an area of the upper quarry that is already excavated. See Exhibits A-6 and C-6.

- C. <u>Variance Required</u>: Land Use Ordinance (LUO) Section 21-3.50-4(a) [Table 21-3] relating to use regulations.
- D. <u>Applicant's Justification</u>: The applicant provided justification statements which are part of the file.

II. FINDINGS OF FACT

On the basis of the evidence presented, the Director has found:

A. <u>Description of Site and Surrounding Uses</u>: The site consists of two large, irregularly shaped lots with sloping terrain separated by the H-1 Freeway. The lots are connected by a road passing beneath the freeway. See Exhibits A-1 and A-2. Excavation occurs on the "upper" portion of the quarry, as

well as primary and secondary crushing operations. "Lower quarry" operations include stockpiling, batching, tertiary crushing, and the quarry's administrative offices. The quarry annually processes about 1 million tons of rock.

The area surrounding the upper quarry (Parcel 82) consists of agriculturally zoned land. See Exhibit A-4. The lower quarry (Parcel 4) is bounded by agriculturally zoned land to the north and east, a residential subdivision ("Kapolei Knolls") to the southwest, and some low-density apartments to the south. See Exhibit A-5.

B. Other Permits and Approvals:

- 1. Conditional Use Permit: The quarry operates under a CUP (No. 72/CUP-15) approved on April 17, 1973. The CUP authorizes the processing of rock material, including drilling, blasting, excavating, hauling, crushing, screening and stockpiling, and ready-mix and asphaltic concrete batching.
- 2. Special Use Permit: A portion of the site is in the State Land Use Agricultural District. The DPP has determined that a special use permit (SUP) is not required for the proposal, since the site is already in quarry use. The recycling facility is not anticipated to have an adverse impact on existing or future agricultural activity on the site, surrounding uses or public services. (The existing quarry preceded the State Special Use Permit requirements, so it is nonconforming in that respect.)
- C. Letter: On August 12, 2002, the State of Hawaii Department of Business, Economic Development, and Tourism (DBEDT), Energy, Resources, and Technology Division wrote in support of the variance. It was noted that the proposal to operate an asphalt and concrete recycling facility would "extend the life of the quarry's supply of virgin rock for the construction industry . . . [and] the life of our island's limited landfills." The recycling operation would make the quarry more "resource-efficient." The state is working to ensure that preference is given to the use of recycled products in state-sponsored road work. The proposed recycling facility will help facilitate this policy. "[The] proposed recycling facility will benefit the construction, demolition and paving industries, as well as the environment."

Public Hearing Comments: The applicant (Mr. Bob Wilkinson) and his agent (Mr. Gene Yong) spoke in support of the request. The agent explained that the proposed recycling operation would use existing quarry facilities and processes. The variance is needed only because material would be trucked in from off-site, rather than excavated on the site. only real change in existing quarry operations would be that trucks, which currently enter the site empty, might arrive carrying loads of recyclable material for drop-off before picking up processed material. Also, a modest scale facility would be added to weigh incoming recyclable material. stockpiling of grade "B" material would be relocated from the "lower quarry" to the "upper quarry", which is within a deep pit formed by past excavation, and not visible from surrounding urban areas. Therefore, there should be no adverse impact to the surrounding community. By consolidating the stockpiling of grade "B" material within the upper quarry, much of the truck traffic will be redirected from the lower quarry to the upper quarry. Access into the lower quarry is closer to the residential subdivision than the upper quarry, which is accessed further. east along Farrington Highway where the land is predominantly agricultural and/or vacant. This should reduce some of the quarry's impact on the residential areas. The height of the equipment used by the quarry is about 30 to 35 feet, which is similar to the height of stockpiled material. Since the recycling operation will be located within a pit, mauka of the freeway, the equipment should not be visible to surrounding urban areas.

Ms. Christine Amii (resident of the Kapolei Knolls subdivision) and Mr. Herman Young (resident of the Royal Ridge subdivision) testified against the variance. Ms. Amii stated that her dwelling is about 30 feet away and downwind from the quarry. When she bought her house, she had been told that the quarry would be closing soon. She is concerned about the health risks that may be associated with the quarry operation, such as emissions and other pollutants, as well as related nuisances, such as dust and noise. In response, the applicant said they recognized the need to be a good neighbor. They planned to relocate the grade "B" material stockpiles away from the residential area, and would not be raising the level of activity at the lower quarry. Once the grade "B" stockpiles have been relocated to the upper quarry, the area that will be vacated will be landscaped to help screen and buffer the quarry from the adjacent residential area. Since there is no burning associated with the quarry operations, emissions are not an issue. They may switch from using diesel fuel to propane (to run equipment), in order to reduce any adverse impact, however. And, the quarry

operation is subject to various regulatory environmental controls.

Mr. Young said he anticipated more complaints about the quarry operation from area residents, since more development within the Makakilo community was planned. He was concerned that the quarry was creeping up closer to the Makakilo residential area. The applicant responded that the long-range plan for the area shows a golf course on preservation land on both sides of the upper quarry. This acts as a buffer between the upper quarry and the Makakilo residential community. Grace Pacific owns this golf course land, and they have no intention of using it as part of the quarry.

III. ANALYSIS

The Director may grant a variance upon the ground of Α. unnecessary hardship if the record shows that (1) the applicant would be deprived of the reasonable use of such land or building if the provisions of the zoning code were strictly applicable. The applicant operates a quarry on the site under an approved CUP, which is a legally permitted and reasonable use. The recycling of construction material, such as concrete, would use equipment and facilities associated with the existing quarry operation. And, the finished products from the recycled material would be the same as those which are now produced from excavated material. As such, the recycling operation will essentially be indistinguishable from the operation of the quarry. However, since the recyclable material originates off-site, the recycling operation technically cannot be included as part of the authorized CUP use. Recycling of construction material is regulated as a "general manufacturing and processing establishment" for zoning purposes. So, it also cannot be authorized through a modification to the CUP. The nature of the quarry use precludes the utilization of the site for agricultural uses. Therefore, the intent of the zoning code use regulations would not be undermined by allowing the proposed recycling operation. The variance would merely enable the applicant to maximize the full potential of the site for activities consistent with the existing quarry use. No additional impacts to surrounding uses are anticipated. The proposal does not meet the LUO definition of "resource extraction", but it is a reasonable enhancement of the quarry. It would be an unnecessary hardship if the applicant were required to locate the recycling operation to a remote industrial district, and duplicate the equipment and activity simply because of the source of the raw material.

- The Director may grant a variance upon the ground of unnecessary hardship if the record shows that (2) the request of the applicant is due to unique circumstances and not the general conditions in the neighborhood, so that the reasonableness of the neighborhood zoning is not drawn into question. The request is supported by unique circumstances. The site is occupied by a quarry, authorized by a CUP. Because of the nature of a quarry, the site is no longer suitable or readily available for permitted agricultural Moreover, a quarry must be where the resource is The earth is mined for its rock, which is separated, crushed and screened, and then batched to produce material for making asphalt and cement. The recycling of construction material will be processed in the same manner. The main difference is that the raw material will not have been excavated from the site, it will be trucked in from demolition sites. The recycling operation will operate in harmony with the quarry. Basically, it will utilize the same equipment and procedures to process the same type of material, and produce the same end products. In some respects, the recycling operation could be considered an "accessory use" of the quarry, except that the scale of the operation will be too large (about 100,000 tons per year, or about 10 percent of the tonnage of excavated material) to be considered "incidental." Still, the recycling operation will be dwarfed by the much larger scale of the overall quarry. Therefore, allowing the recycling of construction material on the site will not draw the zoning into question.
- The Director may grant a variance upon the ground of unnecessary hardship if the record shows that (3) the request, if approved, will not alter the essential character of the neighborhood nor be contrary to the intent and purpose of the zoning ordinance. The applicant proposes to relocate the stockpiling of grade "B" material to the upper quarry. These stockpiles include the material produced by the recycling operation, and that produced by the quarry. And, the area that will be vacated after the relocation will be landscaped and no longer used for quarry operations. relocation of the stockpiles of grade "B" material will also reduce some of the current truck traffic at the lower quarry. These changes could also reduce other impacts that the existing quarry may have on the residential areas to the south, such as noise or dust. However, the activities associated with the recycling operation will be conducted within an excavated pit in the upper quarry. That area is remote from and not visible to surrounding urban areas. Therefore, the proposal is not anticipated to alter the essential character of the neighborhood. Indeed, the recycling should be essentially indistinguishable from the existing quarry operation. Once the recyclable material is

delivered to the site, it would be difficult to distinguish between the recycling operation and the other ordinary functions of the quarry. The material produced from the recycling operation will be added to that produced from the material quarried on the site. Because of the almost seamless merging of the normal quarry functions and the recycling operations, the request is not contrary to the intent and purpose of the zoning.

Both the recycling operation and quarry operations will produce grade "B" material, which will be stockpiled on the site. Therefore, it is appropriate to condition the variance to restrict the stockpiling of grade "B" material to the upper quarry. This will minimize impact, particularly since grade "B" material is currently stockpiled near the Kapolei Knolls residential subdivision. The applicant has offered to provide a wide landscape strip along the southwestern property line of the lower quarry, which abuts a residential subdivision. This is a good idea, since it will help to mitigate the impact of the quarry. Although the quarry preceded the adjacent subdivision, a landscape buffer, e.g., about 50 feet wide along the shared property line would lessen the potential for conflict between incompatible land uses.

IV. CONCLUSIONS OF LAW

The Director hereby makes the following Conclusions of Law:

- A. There is evidence that the applicant would be deprived of a reasonable use of the land or building if the provisions of the zoning code were strictly applied.
- B. The request of the applicant is due to unique circumstances and not to general neighborhood conditions, and it does not question the reasonableness of the neighborhood zoning.
- C. The request will not alter the essential character of the neighborhood nor be contrary to the intent and purpose of the zoning ordinance.

V. DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Conclusions of Law, the Director of Planning and Permitting hereby <u>APPROVES</u> the application for a variance to allow a general manufacturing and processing establishment (an asphalt and concrete recycling facility in the Makakilo Quarry), which is not a permitted use in agricultural districts, subject to the following conditions:

- A. All stockpiling of grade "B" material currently located on the southwest side of Parcel 4 shall be relocated to the "upper quarry," mauka of the H-1 Freeway, as generally shown on Exhibit "A-3," attached hereto. The "lower quarry" area vacated by the relocation of the stockpiles of grade "B" material shall essentially remain vacant. (The relocation shall be done in conjunction with the landscaping required by Condition B below.)
- B. Prior to the commencement of the asphalt and concrete recycling operation, the applicant shall submit to the DPP a landscape plan, for the review and approval of the Director, which shows a minimum 50-foot wide landscape strip, including canopy-form trees and other plantings along the southwestern property line of Parcel 4, which abuts the Kapolei Knolls subdivision.
- C. The applicant shall complete the improvements required by the approved landscape plan within 4 months from date of its approval. The applicant shall submit photographic documentation adequate to show compliance with this condition within the time limit.
- D. The required landscape area shall be maintained in good condition for the life of the recycling operation.
- E. This variance may be revoked by the Director when, due to a material change in circumstances, one or more of the three Charter-required findings of hardship can no longer be made; or when there is a breach of any of the conditions above stated; provided that, for good cause, the Director may amend the above conditions.

Dated at Honolulu, Hawaii, this 13th day of September, 2002.

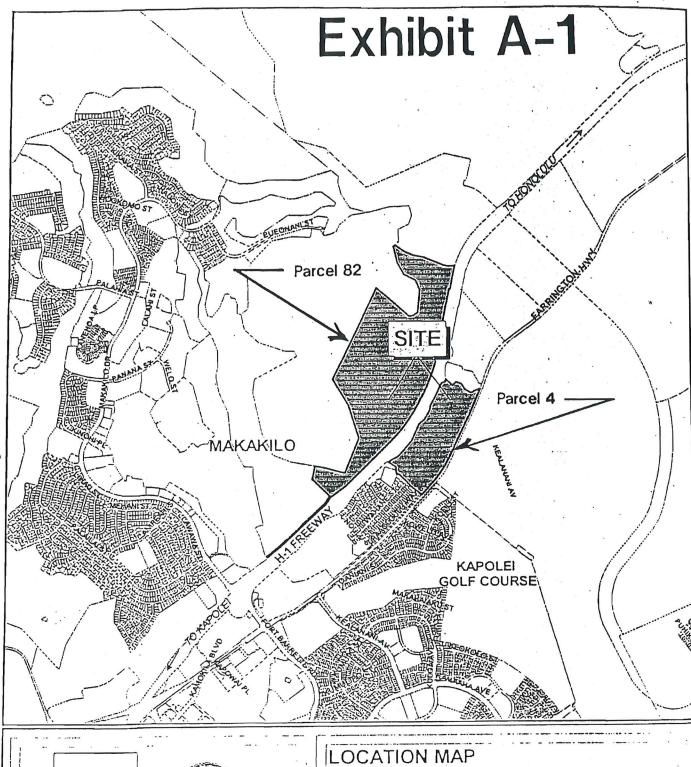
DEPARTMENT OF PLANNING
AND PERMITTING
CITY AND COUNTY OF HONOLULU
STATE OF HAWAII

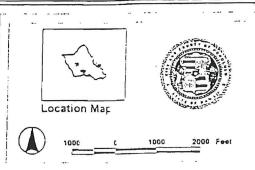
By

RANDALL K. Director FUJIKI, AIA

RKF:nt

Attachments
POSSE Doc. No. 173303





LOCATION MAP HONOULIULI, EWA

TMK: 9-1-16: 4 and 9-2-3: 82 FOLDER NO.: 2002/VAR-51

ARCHEW 1.2
HOND, ULULUMD INFORMATION SYSTEM
COMPRIGHT CITY I COUNTY OF HONDLULU
ALL RICHTS RESERVED ICC
DATA DOES MOT REPLACE SITE SURVEYS

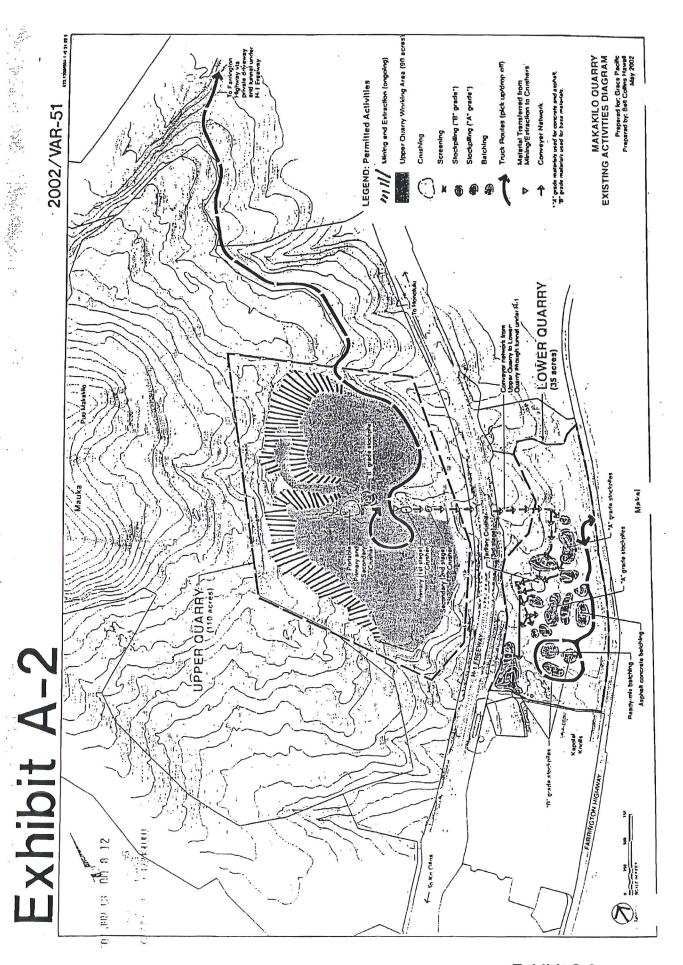


Exhibit C-6

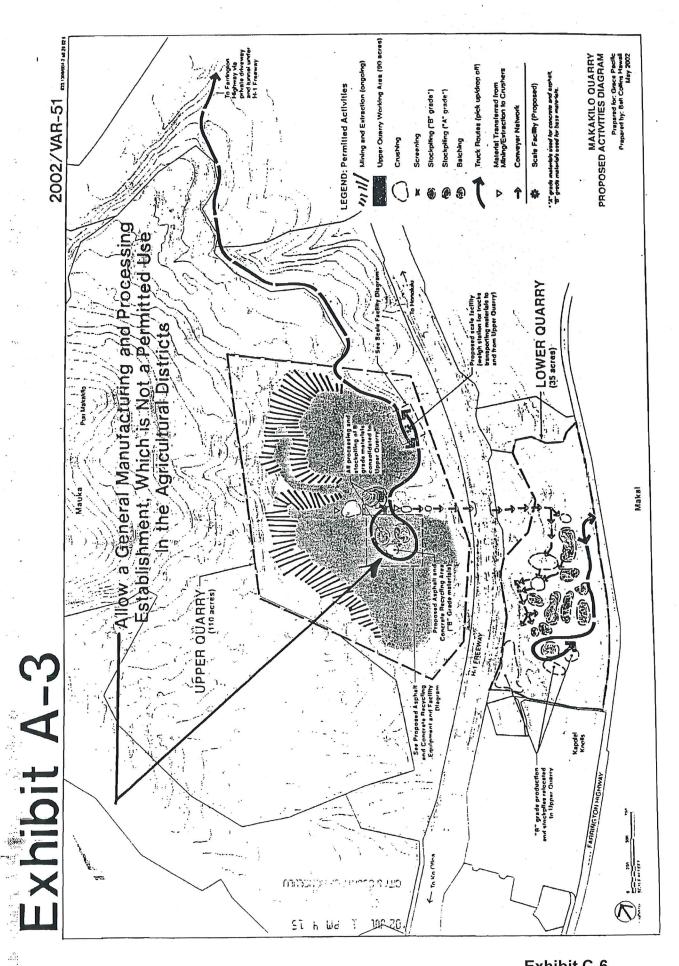
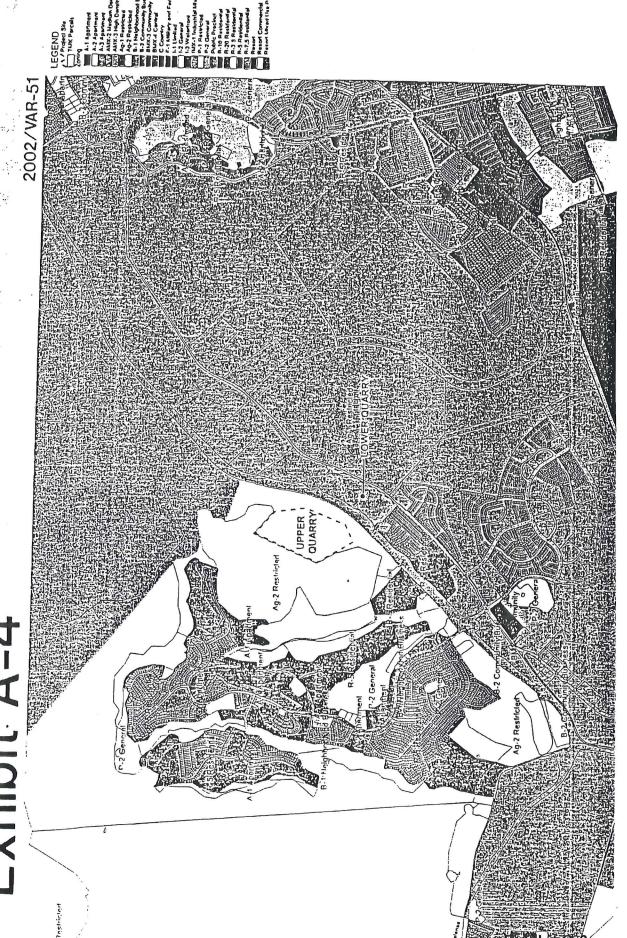


Exhibit C-6



Makakilo Ovarry Zoning Map

MAKAKILO OUARRY REGIONAL PHOTOGRAPHS Prepared for: Grace Pacific Prepared by: Belt Collins Hawaii May 2002 Exhibit C-4 0". 2002/VAR-51 Working Area and Vertical Rock Face heyond (Makekilo Querry/Upper Querry) © VIEW IOON FairIngton Highway Exhibit C-5 Exhibit C-2 Kapolei (Farrington Highway at Fort Barrelle Road) Exhibit C-3 Exhibit C-1 Makabila Ouarry (Upper Quarry) Reyand (A) Wew from Upper Makakilo Residential Neighborhood Wewner Makakilo Drive at 11.1 Freeway The state of the s

Exhibit C-6

