BW & ASSOCIATES, INC.

January 7, 1992

Mr. Bob Copeland Copeland Paving Company P.O. Box 608 Grants Pass, Oregon

Regarding: Noise Measurements, Proposed Gravel Removal Site, Applegate River Near Murphy, Oregon

Dear Mr. Copeland:

Pursuant to your request, I accomplished a sound pressure level (SPL) test at a site south of the Applegate River, west of Murphy. The purpose of the testing was informational, to determine potential noise levels from proposed equipment operations.

MEASUREMENT SETUP:

I utilized a General Radio 1565D Sound Pressure Level meter, mounted on a tripod, and located at the west property line of the Copeland property. A loader and belly-dump tractor/trailer were operated approximately 400 feet east in the center of Copeland property. The nearest residence was 550 feet west of the SPL meter location.

Background SPL was in excess of 40 dBA.

FINDINGS:

The average SPL under the above conditions was 49.7 dBA (4.5 minutes of sampling); the average will be approximately the same as the $L_{f,\emptyset}$, determined from measurements every 15 seconds for 60 minutes, with no conditional variations.

Noise peaks (maximums) took place during initial material drops into the trailer (64 dBA), and upon compressed air releases from the tractor (60 dBA).

The noise from passing vehicles on Hwy 238 (300 ft. + to the south) resulted in the following SPL's:

> 52 dBA Cars - 55 dBA Trucks 60 dba Loader

During the mid-morning sound measurements on January 6, 1992, highway traffic was light and did not interfere with the actual SPL measurements. From the above traffic-oriented levels, it is obvious that passing vehicles are capable of producing noise levels which are slightly higher than the measured operational levels.

The technical requirements for industrial-to-residential noise situations is found in DEQ rules, OAR 340-35-035, Table 8: The 7 a.m. - 10 p.m. L_{50} allowable is 55 dBA. See attached copy of table.

Inspection Report - Copeland Sand & Gravel Page 2 of 2

Copeland Sand & Gravel, when they apply for a DOGAMI permit for this site, were requested to submit plans and dig the pond so that it has an irregular shore line, and also to leave an island or two in the pond for predator-free wildlife nesting sites. Based on the distance from the flowing channel, there is a very minimal potential for possible stream capture of the proposed mining pond except during a catastrophic flooding event. The distance between the Applegate River and the site is approximately 200 feet.

There is shallow groundwater at this site because it is an alluvial gravel deposit associated with the Applegate River. The pit will be mined wet, which makes the potential for fugitive dust as a nuisance during mining very limited. This also negates any concerns regarding potential impacts to adjacent wells from pit de-watering.

There could be minor dust problems associated with the construction of the visual and noise berms which will be needed to isolate the site from the closest residence. However, if this is done at the proper time of year when the ground is moist or if water trucks are available, this could be easily mitigated with minimal impact to the local residences.

EFS:dm:01/10/92



Department of Geology and Mine .l Industries

1534 QUEEN AVE. SE, ALBANY, OREGON 97321 PHONE (503) 967-2039

RECEIVED JAN 1 3 1992

REPORT OF ON-SITE INSPECTION

Copeland Sand & Gravel PO Box 608 Grants Pass, OR 97526

S20, T37S, R5W ODOT Bar Josephine County

DATE OF INSPECTION: November 21, 1991; Revised January 8, 1992

This is a proposed site which may be permitted by Copeland Sand & Gravel and is located on ODOT property near the intersection of Murphy Creek Road and State Highway 238. An application has not yet been submitted to DOGAMI.

I was accompanied on this initial inspection by Bob Copeland and Dave Stahley, Copeland Sand & Gravel; David Haight, ODFW; and Steve Moser, DSL.

This site has been owned by the Department of Transportation for many years and has been reportedly used as a material source four or five times. Recent activity apparently has been limited to removal of a few dump truck loads at a time for maintenance purposes for highway shoulders and such. It has been some time since a large project has occurred at the site. Consequently, the existing proposed mine area would require an operating permit, reclamation plan, and bond because of the amount of revegetation that has occurred in the previously disturbed area.

This will be a simple, straightforward pit run excavation with no long-term natural resource impacts expected. The material will be processed off site. Habitat diversity should actually be increased by the proposed excavation of a pond.

Page 1 of 2

cc: DSL - Jim Barlow DSL - Steve Moser

Josephine County Planning Dept.

ODFW - Central Point

Inspected by _	E. Frank Schnitze	r
	9 Jm. LC. PA	- WINT A
Signature	C. Drung Joney	
Title	Reclamationist	Canal Call Solver Management

EFS/dm:01/10/92

MINED LAND RECLAMATION

west. Williams Highway is directly south of the parcel. Property on the opposite side of the Williams Highway is steep and forested. The applicant's processing facility is approximately 1000 feet upriver from the site. See Exhibits J and K.

Question 26: The proposed use will not significantly affect the overall land use pattern. Why?

Response: The type of activity which the applicant intends has occurred on the parcel to some degree for many years. The applicant's processing site is less than one-half mile from the parcel. Some limited forest and agricultural activities occur near the site and the other nearby residences. The applicant's intended use is blocked from view by natural and manmade characteristics on the site. The applicant's use will be temporary and the applicant will reclaim the site once extraction is complete. Any affect on the parcel will be limited and short-lived. Once the proposed use is complete, the parcel will be left in better than its present condition. Consequently, the proposed use is not inconsistent with other activities in the surrounding area.

Question 27: The proposal involves ____ acres which is the minimum amount of land necessary for the use, and would not be sufficient in size to alter the stability of the overall land use pattern.

Response: The proposed use involves approximately 6.00 acres of the 9.46 acre site. Thus, the activity will be on less than 2/3 of the parcel, the remaining area being left for natural buffers between the activity and the Applegate River, the Williams Highway, and adjacent property owners. Using substantially less than the total parcel will help to assure that the proposed use will not alter the stability of the overall land use pattern.

Question: Please describe how the proposed use complies with Section 15.213.

15.213.1.a. The proposed use fully accords with all applicable standards of the County and State laws or regulations.

I. Compliance with State Law.

The proposed use is the removal of aggregate from land which is owned by the Oregon State Department of Transportation (DOT) and will be leased by the applicant. This use fully accords with all relevant state laws.

The proposed activity is consistent with Oregon land use laws. The parcel is zoned as Exclusive Farm (EF). ORS 215.213(2)(d)(B) permits the mining of aggregate in an EF zone upon obtaining a conditional use permit (CUP).

The proposed use will require a permit from the Oregon State Department of Geology and Mineral Industries (DOGAMI). After receiving the CUP pursuant to this application and before undertaking the proposed use, the applicant will apply to DOGAMI for that permit.

DOGAMI has undertaken an on-site inspection of the parcel. In its report of that inspection, a copy of which is attached hereto as Exhibit A, DOGAMI indicates that there currently appear to be no problems with the applicant obtaining the permit, so long as the applicant obtains the appropriate operating permit and bond and develops an adequate reclamation plan. As noted in Exhibit A, upon completion of the proposed use and reclamation the parcel will be in a situation more favorable to wildlife habitat. There is little risk of the site impacting upon the channel of the Applegate River. Dust problems will be minimal since the site will likely be mined wet. Any dust problems that do occur can be controlled through watering the site as necessary. No risk to nearby wells is likely. Only a slight dust problem exists with respect to the construction of visual and noise berms. Again, this can be mitigated easily with water.

An official of the Oregon Department of Fish and Wildlife (ODFW) has also conducted a site investigation. The ODFW opinion, a copy of which is attached as Exhibit B, indicates that the proposed use will have little effect on area fish and wildlife so long as the applicant adheres to recognized conditions. The ODFW concurs that the parcel may in fact benefit from the activity after reclamation.

Oregon law requires that the proposed use meet certain noise level requirements. The Oregon Department of Environmental Quality (DEQ) maintains rules which set maximum noise levels. The applicant has undertaken tests of noise levels expected from the site. A copy of the report which resulted from such tests is attached hereto as Exhibit C. That report indicates that the proposed use will comply with DEQ rules. In addition, mining wet

aggregate produces relatively little noise, further reducing the risk of possible noise complaints. The applicant's vehicles have efficient muffling devices and will be equipped with state-of-the-art reduced-noise reverse warning beepers. See Exhibit D.

II. Compliance with County Rules and Ordinances.

Goal 7, Policy 7, of the County's Acknowledged Comprehensive Plan states:

"Since the County has a wide variety of mineral resources, steps shall be taken to maintain existing inventories, prevent encroachment by incompatible use, and identify potential processing sites. Land allocations and ordinances shall be developed to ensure that extracting, transporting and processing activities have a minimal impact on land, air, and water resources."

The removal of aggregate is clearly consistent with this section.

The applicant is aware of no other county ordinance affecting the proposed use on this parcel.

15.213.1.b. If impacts will result from the proposed use, why adjoining property owners should bear the inconvenience of a change in land use.

In response to this question, it is imperative to note that the applicant's proposed use will not be a "change" in land use. DOT has owned the parcel since approximately 1939, and has used the site frequently over the years for no activity other than aggregate mining. The applicant acknowledges that DOT's activity on the site has been a nonconforming use and the applicant must obtain a conditional use permit to further utilize the parcel.

The applicant believes that adjoining property owners will bear little if any inconvenience from the proposed use. The majority of the residences in the area are on the opposite side of the Applegate River from the applicant's site. See Exhibit E. The condition of the site is such that removal of the aggregate will produce little or no dust. The site will involve so called "wet mining", where moisture will be naturally and constantly present in the aggregate as it is removed. Furthermore, the applicant will take all reasonable measures to minimize dust as vehicles enter and exit the site, including paving the access road or maintaining it with crushed rock, and oiling and watering it as is necessary. The applicant will erect earthen berms to further minimize dust and noise.

Study of activity on the site indicates that it will produce no more noise than occurs from present activities in the area, including traffic on the Williams Highway. The actual extraction of wet aggregate produces relatively little noise. All noise from the proposed use is expected to be below DEQ maximum allowable standards. See Exhibit C. The applicant's vehicles are

equipped with adequate muffling devices and use state-of-the-art reverse warning beepers which automatically decrease or increase volumes to compensate for background noise. See Exhibit D.

What limited view those few nearby homes will have of the site will be obstructed by trees already present on the site as well as by the berms. Wildlife in the area may actually benefit from the activity after reclamation, thereby benefiting adjoining property owners. The site has been used frequently for illegal random dumping of garbage. See Exhibit M. This will be removed before reclamation is complete, enhancing the aesthetic value of this site.

The applicant has a record of nonoffensive activities in the area as well as concern for the comfort and convenience of local residents. The applicant has never been cited for a noise violation for its rock crushing site. Attached as Exhibits F and G are letters from local residents, including one who has lived in close proximity to the applicant's rock crushing site (a use which is far more intense and obtrusive than the use proposed in this appliation). These individuals have found applicant's activities to be entirely unobjectionable. Nothing indicates that the applicant's activities in connection with this proposed use would be any less agreeable. In fact, since the proposed use is less intensive than the applicant's crushing facility, the risk of disturbing neighboring property owners is particularly unlikely. Furthermore, the proposed use will be limited in duration. The applicant estimates that its activities on the site should last approximately two years. Actual mining will be intermittent during this time.

15.213.2. The applicant believes that all inquiries as to compliance with section 15.213.2 of the county's zoning ordinance are addressed in the application and in response to specific questions below.

RESPONSES TO SPECIFIC APPLICATION QUESTIONS.

Question 2: How will you limit other annoyances to adjoining, occupied, public or private property, State Scenic Waterways and adjacent public roads?

Response: As applicant's response to the above inquiries and attached exhibits indicates, minimal annoyance is likely to result from the proposed use. Any annoyance will be further limited by the applicant erecting earthen berms on the site to help prevent fugitive noise and dust. Furthermore, the applicant will pave the single access road to the site or will maintain it with crushed rock, a material which produces little dust. This road will be treated with oil and/or water as is necessary during particularly dry conditions. The parcel is in no proximity to a State Scenic Waterway.

Question 3: Screening will be provided. What type of screening material? Height? Sight obscuring?

Response: Sight, dust and noise screening will be provided by trees growing on the site, and by dust and noise berms which the applicant will construct. In addition, the removal of the aggregate will take place in a depression on the parcel, a natural feature which will be increased by mining, further limiting the escape of dust and noise. See Exhibit H. Trees are of up to twenty feet in height. The trees will obscure visibility of the sight from the Williams Highway, from the opposite side of the Applegate River and the closest residences. The berms are planned to be six feet in height and will provide screening from both dust and noise. The applicant will accept reasonable specific conditions of the county in the construction and maintenance of these berms.

Question 6: Possible requirement of safety fence.

Response: The applicant believes that a safety fence is unnecessary under the circumstances. This site is to be used only for excavation of surface aggregate and not for mining. The site will be screened by trees and natural and man-made berms which will be sufficient barriers to the area. However, if so required, the applicant will construct an eight foot chain link fence. The fact that the proposed use will occur on only 2/3 of the parcel, away from the property boundaries, assures that there will be adequate setback for the erection of a safety fence should the county so require. See Exhibit I.

Question 8: Erosion control and reclamation plan.

Response: The applicant has been in communication with DOGAMI with regards to obtaining the permit required in order to proceed with aggregate removal. A reclamation plan and bond is required in order to obtain that permit. The applicant will forward to the county a copy of the reclamation plan along with the necessary DOGAMI permit as soon as the applicant obtains it after issuance of the conditional use permit. The plan will likely include the construction of a pond on which will significantly improve upon the present condition of the parcel. Attached as Exhibit L are photos of other of the applicant's extraction sites before and after digging. These all show that the applicant has good experience in adequately and successfully reclaiming other sites.

Question 9: Permits required by DOGAMI and DEQ.

Response: Applying for the necessary DOGAMI and DEQ permits will require the expenditure of application fees as well as time and other resources in connection with application preparation, bonding and possible site evaluations by experts. Preliminary discussions with representatives of those agencies indicate that permits should be obtained with little difficulty. Applicant requests that it be permitted to defer applying for necessary permits pending determination of this application in order to avoid unnecessary expenses in the event that this application is denied.

Question 13: Where the proposed development is located in a resource zone, are the soils on the property rated for agricultural or forest use?

Response: The parcel consists primarily of rocky, riverwash sand and aggregate with no agricultural or forest value.

Question 14: If impacts will result from the proposed use, why adjoining property owners should bear the inconvenience of a change in land use?

Response: See response to 15.213.1.b. above.

Question 16: Will the advantages of the proposed use outweigh the disadvantages to the immediate neighborhood?

Response: As stated above, reclamation of the parcel after extraction of the aggregate may benefit adjoining owners. The proposed use of the property will eliminate future intermittent use of the site by DOT for precisely the activity the applicant intends. Once the aggregate has been removed, most likely within the next two years, the site will likely go unused. The site is likely to be left in a situation better than before applicant leased the site from DOT.

In addition, the site is only approximately 1000 feet from the applicant's processing site. The use of the site will therefore considerably reduce overall traffic of the applicant's vehicles on the Williams Highway and will save the applicant significant amounts of fuel during the period in which it utilizes the site. The alternative is for the applicant to use sites much farther from the DOT's site, yet still travel the same amount on the same portion of the Williams Highway.

Question 18: In resource zones, a conditional use requires findings that the use will not be injurious to property and improvement in the area of the request.

Response: As stated in responses above, the proposed use will have little impact on adjoining or nearby property. State officials have indicated that environmental concerns are minimal considering the area and the proposed use. The site may even benefit from the activity after reclamation is complete. The removal of aggregate, by its nature, will cause no physical injury to improvements or to property. The proposed use will have no discernable impact on the Applegate River which could affect any other property owner.

Question 20: The use will not be detrimental to the health, safety or general welfare of persons residing or working in the area where the proposed use would be located. The use will not have a significant detrimental effect to persons residing in the area because:

Response: The proposed use will be merely a continuation of the DOT's use of the site. The removal of aggregate emits no harmful materials or substances. This activity will not effect the Applegate River or other local water resources. Nor will it harm wildlife. Because of the characteristics of this site and what the applicant must do to obtain necessary state permits, the proposed use will have no detrimental effect upon any persons living or working in the surrounding area.

Question 22: The use will not cause any reduction in resource quality of the neighboring parcels.

Response: Removal of aggregate from this site will have no conceivable impact upon timber, agricultural, water or any other resources.

Question 23: That the use does not interfere seriously with accepted forest or agricultural practices on adjacent lands devoted to resource use. There will be no reduction in the area of resource management caused by the proposal.

Response: The extraction of aggregate will have no impact whatsoever upon any forest or agricultural practices. One adjoining parcel currently appears to be farm or pasture land. Natural tree buffers will adequately protect this parcel's agricultural use, which at this time appears to be limited. The parcel itself is incapable of maintaining forest land or any other significant agriculture by virtue of its rocky, sandy condition. Some forest land is on the opposite side of the Williams Highway. The proposed use will have no effect on this land. Neither the parcel or any other nearby parcel will suffer any adverse impacts with respect to resource management.

 $\frac{\text{Question}}{\text{prohibit}} \frac{24}{\text{any}}$ That the proposed use will not interfere with or prohibit any agricultural or forestry uses on adjacent lands.

Response: Currently, little if any such resource use occurs on any property adjacent to or near the site. The removal of aggregate will produce nothing which would in any way impede any such activities which might take place, including the use of such property for farming, recreation or wildlife management. In fact, DOGAMI and ODFW indicate that the proposed use may benefit such resources. Exhibits A and B

Question 25: That the use does not materially alter the stability of the overall land use pattern of the area and the area utilized for the conditional use shall be limited to the size necessary for the proposed use. The existing uses in the area are:

Response: To the north and east is the Applegate River, with residences north across the river. Directly to the west is a small farm. A small number of residences are to the north-

RURAL JOSEPHINE COUNTY

CONDITIONAL USE PERMIT

ROCK PROCESSING AND CRUSHING, CEMENT AND ASPHALT BATCHING, EXPLORATION, MINING, PROCESSING AGGREGATE OR MINERALS OR

SUBSURFACE RESOURCES Application Form

Fee \$165.00

100 4709100
JOSEPHINE COUNTY ZONING ORDINANCE SECTIONS: 3.025(3) and (7); 3.041; 4.025(3) and (7); 4.041; 5.020(4)*; 6.025(2); 6.041; 7.025(5); 7.041; 8.025(4) and (5); 12.020(5)*; 14.136; 14.137; 14.138; 15.213 through 15.219 (* = Permitted)
* * * * * * * * * * * * * * * * * * * *
LEGAL: TWN 37, RNG 5, SEC 20, QS, Tax Lot 2300
PROPERTY LOCATION: Williams Highway
EXISTING ZONING: EF COMP PLAN:
PARCEL: ACRES 9.46 WIDTH DEPTH
OTHER INFORMATION/APPLICATIONS SUBMITTED: There will be no
processing done on this property.
**
1
* * * * * * * * * * * * * * * * * * * *
(James Bilderback) Owner(S): Oregon Dept. of Transportation TELE: 440-3399
MAILING ADDRESS: 3099 N.E. Diamond Lake Blvd., Roseburg, OR 974
APPLICANT: Copeland Sand & Gravel, Inc. TELE:
MAILING ADDRESS: P. O. Box 608, Grants Pass, OR 97526
ATTORNEY/REPRESENTATIVE: Walter L. Cauble
MAILING ADDRESS: P. O. Box 378, Grants Page, OR 97526
Megalal
Copeland Sand & Gravel, Inc. Representative Attorney
Owner Applicant Representative Attorney

(Power of Attorney)

I, R. S. Copeland, ' te President, Copeland San' & Gravel, Inc.

for Conditional Use armit for Conditional Use _ermit with the Josephine County Planning Office to be considered for scheduling before the appropriate review bodies: My signature below affirms that I have discussed my , of the Planning Department staff. application with and that I understand the following:

- That although the Planning Department staff may have rendered and 1. opinion and may prepare a staff report concerning the legal criteria relevant to an application of this nature, I have the ultimate burden of addressing and submitting evidence relative to my application and this responsibility exists independent from any such statements or reports by the Planning Office or staff.
- 2. That I may retain legal counsel to assist me in the presentation of my application and that it may be in my best interest to do so.
- That if I have any questions or require additional information I may 3. contact the Planning Department staff and discuss the application with them, but that such discussions and/or information will not include legal advice, and shall not become binding upon the County in any respect.
- That this notarized statement will be appended to the staff report presented to the hearings body and that it will be forwarded to the Citizen Advisory Committee for the area in which the subject property 4. is located.
- That if the development proposed is located within the Urban Growth Boundary it is subject to any laws and ordinances that may also apply.
- That the application may be returned to me for additional information 6. before scheduling.

Mapricant - Copeland Sand & Gravel, In R. S. Copeland, Vice President

NOTARIZATION REQUIRED FOR PUBLIC HEARING ITEMS ONLY

) 33. County of Josephine day of March , 1992, personally came before me, a Notary Public in and for said County and State, the above R. S. Copeland , who executed the written instrument and acknowledged to me that he/shex executed the same freely and

O flee

STATE OF OREGON

voluntarily.

Notary Public, State of Oregon My Commission Expires: 2-4-96

OFFICIAL SEAL KATHRYN J. LOGUE NOTARY PUBLIC - OREGON COMMISSION NO. 012741 MY COMMISSION EXPIRES FEB. 4, 1996

Notary Stamp

510 N.W. 4th ST., GRANTS PASS, OR 97526

SITE REVIEW AGENDA

JOSEPHINE COUNTY PLANNING DEPARTMENT

THURSDAY, MAY 7, 1992 - 3:30 P.M.

WASHINGTON ANNEX

- 1. Request approval for three open-sided storage sheds for wood storage in the C-5 (Commercial) zoning district for property located at 1741 Dowell Road; more specifically described as 36-6-24-33, TL 1300. Property Owner: Leon Stutzman (Farmer's Building Supply).
- 2. Request approval for a Bed and Breakfast in the RR-1 (Rural Residential one acre minimum) zoning district for property located at 11741 Galice Road; more specifically described as 34-6-36-31, TLs 2000 & 2100. Property Owner: Gilbert and Mary Thomason.
- 3. Request approval for a Conditional Use Permit for extraction of aggregate in the EF (Exclusive Farm) zoning district for property located off Williams Highway; more specifically described as 37-5-20, TL 2300. Property Owner: Oregon Dept. of Transportation. Applicant: Copeland Sand & Gravel, Inc.

RURAL JOSEPHINE COUNTY CONDITIONAL USE PERMIT

ROCK PROCESSING AND CRUSHING, CEMENT AND ASPHALT BATCHING, EXPLORATION, MINING, PROCESSING AGGREGATE OR MINERALS OR SUBSURFACE RESOURCES

Application Form

3-10-92
P165-

Fee \$165.00 Paid 165-
JOSEPHINE COUNTY ZONING ORDINANCE SECTIONS: 3.025(3) and (7); 3.041; 4.025(3) and (7); 4.041; 5.020(4)*; 6.025(2); 6.041; 7.025(5); 7.041; 8.025(4) and (5); 12.020(5)*; 14.136; 14.137; 14.138; 15.213 through 15.219 (* = Permitted)
* * * * * * * * * * * * * * * * * * * *
LEGAL: TWN 37, RNG 5, SEC 20, QS , Tax Lot 2300 TWN, RNG, SEC, QS, Tax Lot
PROPERTY LOCATION: Williams Highway
EXISTING ZONING: EF COMP PLAN:
PARCEL: ACRES 9.46 WIDTH DEPTH
OTHER INFORMATION/APPLICATIONS SUBMITTED: There will be no
processing done on this property.
(James Bilderback)
OWNER(S): Oregon Dept. of Transportation TELE: 440-3399
MAILING ADDRESS: 3099 N.E. Diamond Lake Blvd., Roseburg, OR 9747
APPLICANT: Copeland Sand & Gravel, Inc. TELE:
MAILING ADDRESS: P. O. Box 608, Grants Pass, OR 97526
ATTORNEY/REPRESENTATIVE: Walter L. Cauble
MAILING ADDRESS: P. O. Box 378, Grants Page, OR 97526
Myselal
Copeland Sand & Gravel, Inc. Representative Attorney
(Power of Attorney)

BWM ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS

CONCLUSIONS:

- For the equipment noted under Measurement Setup above, working in the midproperty area, it appears that the resulting noise levels will be compliance with the DEQ rule (Table 8) for the nearest residential property.
- 2. Similarly, it appears that the incremental increase limit (10 dBA in one hour) over the existing ambient level, will not be exceeded, provided that truck access to the highway is adequately located or attenuated.
- 3. Impulse sounds (as in aggregate hitting the bottom of the steel trailer) may be annoying to the closest neighbors, although I predict that the impulse sounds from the operation will not exceed the levels in yet another rule, OAR 340-35-034 (1)(d). From my experience, the impulse sounds from sand and gravel removal operations are amenable to control by equipment operators.

I would be pleased to provide an explanation of this report at a public meeting. Call me with any of your questions.

Sincerely,

1. L. Gantenbein, Jr., P.E.

Environmental Engineering Manager

RLG/dmr 92-008G

Enclosures

