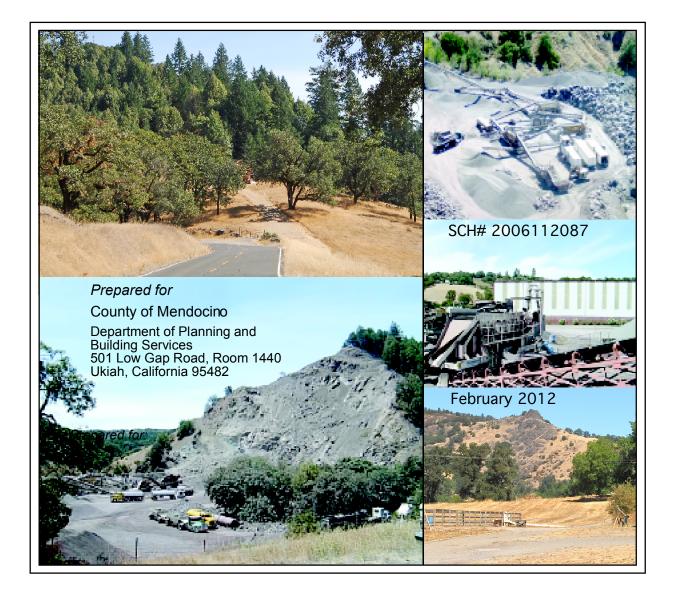
HARRIS QUARRY USE PERMIT AND RECLAMATION PLAN FINAL ENVIRONMENTAL IMPACT REPORT



Leonard Charles and Associates



HARRIS QUARRY USE PERMIT AND RECLAMATION PLAN FINAL ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NO. 2006112087

February 2012

- Prepared for: County of Mendocino Department of Planning and Building Services 501 Low Gap Road, Room 1440 Ukiah, California 95482
- Prepared by: Leonard Charles and Associates 7 Roble Court San Anselmo, California 94960 415.454.457

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Chapter 3:	Revisions to the Draft Program EIR	Page 433

CHAPTER 1 INTRODUCTION

A. PROJECT DESCRIPTION

The applicant, Northern Aggregates, Inc., seeks County approval of the proposed expansion of the Harris Quarry and construction of an asphalt processing facility at the quarry (hereafter called "the project"). The existing quarry is on the west side of U.S. Route 101 just south of the Ridgewood Grade and Black Bart Drive. The proposed project would expand the existing 11.5-acre quarry to a final size of about 30.6 acres. The project includes adding an asphalt plant, with associated support facilities, at a separate site on the project property, immediately south of Black Bart Drive and about 2,000 feet west of Highway 101. The project also includes a proposed Reclamation Plan that describes how the site will be reclaimed after completion of operations. Finally, the project includes a proposal to amend the County Zoning Ordinance to allow, under certain conditions, aggregate processing facilities at active quarries in the Rangeland zoning district. Specifically, the applicant seeks County approval of the following:

- 1. Amending the Mendocino County Zoning Code to create a Mineral Processing Combining District (MPCD).
- 2. Adding an MPCD to a portion of project parcel APN 147-140-07.
- 3. Rezoning 18 acres of Assessor's Parcel No. 147-140-07 to add a new Mineral Processing Combining District that would allow processing of aggregate for the length of the Use Permit. The applicant has volunteered to include a condition of approval requiring the applicant to submit an application having the MP Combining District removed from the 18-acre site at the end of the Use Permit.
- 4. Use Permit Renewal/Modification (UR 19-83/2005) to allow:
 - extraction and processing of 200,000 cubic yards (CY) *in situ* per year for a 30-year period
 - production of up to 150,000 tons (58,280 CY) of asphalt per year
 - nighttime operations up to a maximum of 100 nights per year
- 5. A revised Reclamation Plan that directs how the site will be reclaimed at the end of the use permit.

B. EIR PROCESS AND RESPONSE TO COMMENTS FORMAT

The County of Mendocino prepared a Revised Draft Environmental Impact Report (RDEIR) for the project and circulated it for public review in May 2011. The public review period began on May 20, 2011 and ended on July 21, 2011. Prior to the close of the public review period, the County extended the public review period until September 6, 2011. This Final EIR consists of the Revised Draft EIR, all comments received on the

Revised Draft EIR, responses to those comments, and revisions to the Revised Draft EIR. This Final EIR will be reviewed by the Mendocino County Planning Commission for its adequacy under CEQA and to make a recommendation to the Board of Supervisors (the Board). Once the Board determines that the EIR is adequate, it will certify the Final EIR. After EIR certification, the Board will consider the merits of the proposed project and whether to approve it or one of its alternatives.

This Final EIR provides a thorough analysis of the comments on the Revised Draft EIR and responds to the comments consistent with the requirements of CEQA. Where comments were received that expressed disagreement with the conclusions of the Revised Draft EIR, the responses clearly address the issue by modifying the Revised Draft EIR, providing additional mitigation, or justifying the conclusion that the analysis in the Revised Draft EIR is correct. This approach will allow the Mendocino County Board of Supervisors to make an informed decision on the project.

Chapter 2 contains the comment letters received during the official public review period and responses to the comments contained in those letters. Those comments and responses are followed by a summary of comments delivered at the two public hearings that were held on the adequacy of the Revised Draft EIR. The public hearings were held on June 18, 2011 and July 21, 2011 before the Mendocino County Planning Commission.

Chapter 3 of this report describes the text changes to the Revised Draft EIR needed to complete the Final EIR. These changes were deemed necessary or desirable given certain comments received.

CHAPTER 2 COMMENTS AND RESPONSES ON THE RDEIR

This chapter provides responses to the written and verbal comments received by the County during the public review period. This section begins with a list of the commentors and where their letter and the EIR preparers' response to the comments can be found. Each letter is followed by a response page(s). Each letter's comments and corresponding responses are numbered for easy reference.

A. LIST OF COMMENTERS ON THE REVISED DRAFT EIR

The County received 71 comment letters (plus 3 notification letters from the State Clearinghouse) on the Revised Draft EIR during the public review period. Seven of these letters were from public agencies and 64 were from 55 individuals or representatives of groups. The table below shows the location of the comment letter and the responses to that letter.

		Comment	Response
Commenter	Date	Page	Page
Public Agencies			
 State Office of Planning and Research 	7/06/11	6	14
	7/29/11	8	14
	9/07/11	11	14
2. California Department of Transportation	7/18/11	15	17
3. California Department of Forestry and			
Fire Protection	6/29/11	18	20
4. California Department of Forestry and			
Fire Protection	5/25/11	21	22
5. Mendocino County Department			
of Transportation	7/21/11	23	24
6. Mendocino County Air Quality Management			
District	5/27/11	25	26
7. Little Lake Fire Protection District	6/23/11	27	28
			-
Interested Parties			
8. Howard F. Wilkins III (Remy, Thomas,			
Moose & Manley LLP)	7/20/11	29	72
9. Howard F. Wilkins III (Remy, Thomas,			
Moose & Manley LLP) (second letter)	8/18/11	129	134
10. Richard Grassetti (Grassetti	0,10,11	120	101
Environmental Consulting)	7/20/11	135	142
11. Richard K. Haygood (TJKM	1120/11	100	112
Transportation Consultants)	7/20/11	150	154
12. Paul Miller (MEC)	7/17/11	163	167
13. Matthew O'Connor (OEI)	7/19/11	175	178
14. Tina Wallis (Clement, Fitzpatrick & Kenworthy		180	182
15. Cathy A. McKeon (Rau and Associates, Inc.)	6/02.11	183	235
16. Jack Magne	6/08/11	240	233
5	6/16/11	240 250	247 256
17. Jack Magne (Keep the Code) (second letter)			
18. Jack Magne (third letter)	7/21/11	258	260
19. Patricia Tetzlaff	7/15/11	261	266
20. Patricia Tetzlaff (second letter)	7/13/11	269	271
21. Sheila Jenkins	6/22/11	272	274
22. Robin Goldner	7/10/11	275	277
23. Larry Jenson	7/18/11	278	280
24. John and Roni McFadden	7/01/11	281	284

Page 3 Leonard Charles and Associates

	25. John and Roni McFadden (second letter)	6/27/11	285	289
	26. Dori Kramer	6/16/11	290	292
	27. Ruth Van Antwerp	6/16/11	293	294
	28. Deborah Pruitt	7/19/11	295	297
	29. Marvin Trotter	7/20/11	298	299
	30. Ann Kelly	7/19/11	300	302
	31. Diane Zucker	7/19/11	303	319
	32. Karen Walsh	7/19/11	297	319
	33. Cynthia Raiser Jeavons	7/20/11	299	319
	34. Karen West	7/20/11	300	319
	35. Kara McClellan	7/20/11	302	319
	36. Charmaine Johnson	7/20/11	303	319
	37. Kerry C. Sullivan	7/20/11	305	319
	38. Christina and Paul Leinwetter	7/20/11	307	319
	39. Lyra Matthews	7/20/11	309	319
	40. Gene Wixson	7/20/11	320	321
	41. Colette Morris	8/01/11	322	325
	42. Carol Cox	7/20/11	326	327
	43. Christina Sears	7/20/11	328	333
	44. Kathe and Ken Todd	7/20/11	329	333
	45. John Wieland	7/20/11	330	333
	46. Tamey Sheldon	7/24/11	331	333
	47. Susan Henson	6/28/11	332	333
	48. Sandra Linn	7/20/11	334	336
	49. Dan Hibshman	7/20/11	334	339
	50. Marty Wysinger	7/26/11	340	341
	51. James Garza	7/19/11	342	345
	52. Dot Brovarney	7/19/11	346	348
	53. Tracey McNamara and Cora Saxton	7/06/11	349	350
	54. Virginia De Vries and Christopher O. Jones	7/17/11	351	352
	55. Jenny Burnstad	7/19/11	353	355
1	56. Stacey Rohrbaugh	7/11/11	356	357
;	57. Linda Breckenridge	7/11/11	358	359
;	58. Jerry Wells	8/10/11	360	361
;	59. Patricia Tetzlaff (petitions)	7/01/11	362	368
	60. Matt McKeon	8/25/11	369	371
	61. Joseph West	8/28/11	372	373
	62. Jack Magne (Keep the Code) (fourth letter)	8/31/11	374	376
	63. Norton Heath	8/31/11	377	378
	64. Cody Bartholomew	9/04/11	381	383
	65. Dennis Slota	9/04/11	384	385
	66. Dori Kramer (second letter)	9/06/11	386	387
	67. Jack Magne (Keep the Code) (fifth letter)	9/06/11	388	392
	68. Randi Dalton	9/06/11	393	411
	69. C. Toren Tvelt	8/30/11	412	413
	70. Dave and Cathy Ortiz	8/24/11	414	415
	71. Anonymous	No date	416	413
	72. Mona Dougherty, RWQCB	7/05/11	418	417
		1100/11	710	720

Comments Made at Public Hearings

73.	Mendocino County Planning Commission			
	Public Hearing	6/15/11	421	425
74.	Mendocino County Planning Commission			
	Public Hearing	7/21/11	428	432

B. PREPARERS OF THE RESPONSES TO COMMENTS ON THE REVISED DRAFT EIR

Responses were prepared by the EIR consulting team, including:

Leonard Charles and Associates

Leonard Charles, Ph.D.	Project Manager
Lynn Milliman, M.A.	Environmental Analyst
Jacoba Charles, M.A. and M.S.	Environmental Analyst

Illingworth & Rodkin

Richard B. Rodkin, P.E.	
Michael Thill	Acoustic Consultant

Bill Popenuck

Bill Popenuck

Air Quality Consultant

Questa Engineering

Will Hopkins, C.E.G Chien Wang. M.S. Mike Harris Engineering Geologist Hydrologic Engineer Geologist

North Coast Resource Management

Estelle Clifton, R.P.F Jennifer Bartolomei Botanist and Wetland Consultant Biologist

Crane Transportation Group Mark Crane, P.E.

Traffic Engineer

The report was prepared under the direction of the Mendocino County Department of Planning and Building Services. Roger Mobley is the Chief Planner for the project, and John Speka provided direction.

C. COMMENTS AND RESPONSES ON THE REVISED DRAFT EIR

The following section of this report contains the letters received and responses to those letters. Each letter or group of related letters is followed by a response page(s). Each comment and its corresponding response are numbered.



STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Edmund G. Brown Jr. Governor

July 6, 2011

John Speka Mendocino County Dept. of Planning and Building Services 501 Low Gap Road, Room 1440 Ukiah, CA 95482

Subject: Harris Quarry Use Permit and Reclamation Plan SCH#: 2006112087

Dear John Speka:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 5, 2011, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely, m Mugan

Scott Morgan Director, State Clearinghouse

Enclosures cc: Resources Agency

PLANNING & BUILDING SERVICES Ukiah, CA 95482

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov Page 6

Document Details Report State Clearinghouse Data Base

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SCH# Project Title Lead Agency	2006112087 Harris Quarry Use Permit and Reclamation Plan Mendocino County		
Type Description	EIR Draft EIR Use Permit Renewal and Reclamation Plan to allow expansion of an existing quarry, extraction of up to 200,000 in-place cubic yards of material per year, production of up to 150,000 tons of asphalt per year from the processed material, nighttime operations that could occur up to 100 nights per year, and an amendment to the County Zoning Ordinance to allow for the asphalt processing to occur. The amendment would entail a rezoning of an 18 acre piece of property adding a newly created "Mineral Processing" combining district (overlay zone).		
Lead Agenc Name Agency Phone email Address	John Speka Mendocino County Dept. of Planning and Building Services 707 463 4281 <i>Fax</i> 501 Low Gap Road, Room 1440		
City	Ukiah State CA Zip 95482		
Project Loca County City Region Lat / Long Cross Streets Parcel No. Township	Mendocino Willits 39° 20' 12.8" N / 123° 18' 41.6" W US Highway 101 and Black Bart Drive 147-180-007, 008 and 147-140-007 17N Range 13W Section 9 Base MDB&M		
Proximity to Highways Airports Railways Waterways Schools Land Use	Forsythe Creek La Vita Charter School Existing quarry would be expanded; processing facilities would be added to an area used as open space. General Plan: Range Land Zoning: Rangeland		
Project Issues	Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian		
Reviewing Agencies	Resources Agency; Department of Conservation; Department of Fish and Game, Region 1E; Cal Fire; Department of Parks and Recreation; Department of Water Resources; Resources, Recycling and Recovery; California Highway Patrol; Caltrans, District 1; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Board, Region 1; Native American Heritage Commission; State Lands Commission		
Date Received	05/20/2011 Start of Review 05/20/2011 End of Review 07/05/2011		



Edmund G. Brown Jr. Governor STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Memorandum

Date:July 29, 2011To:All Reviewing AgenciesFrom:Scott Morgan, DirectorRe:SCH # 2006112087Harris Quarry Expansion Project

Pursuant to the attached letter, the Lead Agency has extended the review period for the 1-2 above referenced project to September 6, 2011 to accommodate the review process. All other project information remains the same.

cc:

John Speka Mendocino County Planning & Building Services 501 Low Gap Road, Room 1440 Ukiah, CA 95482

BY PLANNING & BUILDING SERVICES Ukiah CA 95482

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1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov



501 LOW GAP ROAD · ROOM 1440 · UKIAH · CALIFORNIA · 95482



July 26, 2011

STATE CLEARING HOUSE

NOTICE OF COMPLETION AND AVAILABILITY OF REVISED DRAFT **ENVIRONMENTAL IMPACT REPORT FOR THE HARRIS OUARRY EXPANSION** (SCH# 2006112087)

Owner/Applicant: Northern Aggregates, Inc. (NAI)

Case Number: Use Permit and Reclamation Plan #UR 19-83/05

Extended Public Review Period: Public review period is extended to September 6, 2011

Mendocino County will be circulating a Revised Draft Environmental Impact Report (DEIR) for the Harris Quarry Expansion Project proposed by Northern Aggregates, Inc. (applicant). The project site is situated on the west side of U.S. Route 101 just south of the Ridgewood Grade between Redwood Valley and Willits (see attached map). The project would expand the existing active quarry from 11.5 acres to 30.6 acres, a proposed expansion of 19.1 acres.

The County issued a Notice of Preparation (NOP) on the original project for this site on November 1, 2006, followed by a Draft EIR circulated for public review in November 2007. Subsequent to the close of the review period but before the Final EIR was completed, the applicant requested that the EIR process be halted while revisions to the project were made in response to comments received on the draft. A second NOP was issued on August 4, 2010, informing the public and reviewing agencies that the applicant had submitted an amended application for a revised project and that a new Draft EIR was to be prepared on this revised project description. This Notice of Availability (NOA) is thereby issued to inform the public that the Revised DEIR has been completed and is now available for review.

The chief differences between the original project and the current project include: 1) the requested Use Permit term is now 30 years instead of an "end of quarry life" term; 2) the concrete facility has been eliminated; 3) the quarry footprint has been reduced to reflect that the current project would be for only 30 years; 4) a number of clarifications and changes have been made to respond to comments received on the original project; and 5) the Reclamation Plan has been revised given these other changes.

The applicant seeks County approval of three actions: (1) a Use Permit Renewal/Modification (UR 19-83/2005) for 30 years to allow expansion of the quarry; extraction of up to 200,000 inplace cubic yards (approximately 258,000 cubic yards processed) of material per year; production of up to 150,000 tons of asphalt per year from the processed material; and nighttime

					Appendix C	
N	otice of Completi	on & Environmenta ise, P.O. Box 3044, Sacram	ento, CA 9581	2-3044 (916) 445-0613	sch #2006112087	
Fo	or Hand Delivery Street	Address: 1400 Tenth Street	"Sacramento,	CA 95814	SCH#2000112007	
Pr	roject Title: Harris Quan	ry Expansion Project				
Le	ead Agency; Mendocino C	County Planning and Build	ing Services	Contact Person: Phone: 707-46	John Speka 3-4281	
	failing Address; 501 Low G	Sap Rd, Rm 1440	Žip: 95	4B2 County: Mend	ocino	
-				Nearest Community: Willits		
~	roject Location: County ross Streets: Black Bart Tr	rail/Hwy 101		•	Zip Code: 95490	
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	Economic/Jobs	Public Services/F	acilitics 🗹	Traffic/Circulation	Other:	
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STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Edmund G. Brown Jr. Governor

September 7, 2011

John Speka Mendocino County Dept. of Planning and Building Services 501 Low Gap Road, Room 1440 Ukiah, CA 95482

Subject: Harris Quarry Expansion Project SCH#: 2006112087

Dear John Speka:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on September 6, 2011, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality-Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan Director, State Clearinghouse

BY PLANNING & BUILDING SERVICES Ukiah, CA 95482

Page 11

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	2006112087 Harris Quarry Expansion Project Mendocino County	
Туре	EIR Draft EIR	
Description	NOTE: Extended Review Per Lead	
	Use Permit Renewal and Reclamation Plan to allow expansion of an existing quarry, extraction of up to 200,000 in-place cubic yards of material per year, production of up to 150,000 tons of asphalt per year from the processed material, nighttime operations that could occur up to 100 nights per year, and an amendment to the County Zoning Ordinance to allow for the asphalt processing to occur. The amendment would entail a rezoning of an 18 acre piece of property adding a newly created "Mineral Processing" combining district (overlay zone).	
Lead Agenc	y Contact	
Name	John Speka	
Agency	Mendocino County Dept. of Planning and Building Services	
Phone	707 463 4281 Fax	
email Address	501 Low Gap Road, Room 1440	
City	Oth Left Oth Left	
Project Loc	ation	
County	Mendocino	
City	Willits	
Region	39° 20' 12.8" N / 123° 18' 41.6" W	
Lat / Long Cross Streets	US Highway 101 and Black Bart Drive	
Parcel No.	147-180-007, 008 and 147-140-007	
Township	17N Range 13W Section 9 Base MDB&M	
Proximity to):	
Highways		
Airports		
Railways		
Waterways Schools	Forsythe Creek La Vita Charter School	
Land Use	Existing quarry would be expanded; processing facilities would be added to an area used as open	
Land 03c	space.	
	General Plan: Range Land	
	Zoning: Rangeland	
Project Issues	Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian	
Reviewing Agencies	Resources Agency; Department of Conservation; Department of Fish and Game, Region 1E; Cal Fire; Department of Parks and Recreation; Department of Water Resources; Resources, Recycling and Recovery; California Highway Patrol; Caltrans, District 1; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Board, Region 1; Native American Heritage Commission; State Lands Commission	

Document Details Report State Clearinghouse Data Base

Date Received 05/20/2011

Start of Review 05/20/2011

End of Review 09/06/2011

Page 13

Response to Letter from Scott Morgan, State Clearinghouse

- 1-1. This is a cover letter that states that the County has complied with State Clearinghouse review requirements for draft environmental documents that are subject to CEQA. No response is required.
- 1-2 This is a notification of the extension of the comment period. No response is required.
- 1-3. This is a cover letter that states that the County has complied with State Clearinghouse review requirements for draft environmental documents that are subject to CEQA. No response is required.

DEPARTMENT OF TRANSPORTATION DISTRICT 1, P. O. BOX 3700 EUREKA, CA 95502-3700 PHONE (707) 441-2009

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENC



ANNING & BUILDING SERVICES Ukiah, CA 95482

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July 18, 2011

FAX (707) 441-5869

TTY 711

1-MEN-101-40.88 Harris Quarry RDEIR SCH# 2006112087

John Speka County of Mendocino Planning & Building Services 501 Low Gap Road, Room 1440 Ukiah, CA 95482

Dear Mr. Speka,

Thank you for giving us the opportunity to comment on the Revised Draft Environmental 2-1 Impact Report (RDEIR) for the Harris Quarry Use Permit and Reclamation Plan. The project proposes to expand operations at the existing Harris Quarry, construct and operate new asphalt facilities, and implement a reclamation plan for the site. The project is located adjacent to Route 101, approximately seven miles south of Willits, on assessor's parcel numbers 147-180-07, 147-180-08 & 147-140-07.

The Department recognizes the importance of this project, and other similar aggregate mining projects, in helping to address California's future infrastructure needs. We have worked closely with the County and the applicants during earlier stages of this project to identify impacts and mitigation measures (please refer to Caltrans letters of correspondence for the Harris Quarry Expansion Project, dated February 13, 2008 and September 3, 2010). We have the following comments:

The applicant has submitted an application for an encroachment permit to initiate . 2-2 the Permit Engineering Evaluation Report (PEER) for the previously identified mitigation measures for impacts to Route 101. Private parties responsible for the cost of the highway improvements are required to enter into a Highway Improvement Agreement (HIA) with the State. The purpose of the HIA is to establish roles and responsibilities for Caltrans oversight and any required reimbursement for design and constructability reviews of the highway improvements. To date, the access improvements proposed have only been considered on a conceptual level. All improvements proposed to be constructed on Route 101 must conform to State standards. Construction of the proposed improvements to Caltrans standards are expected to adequately mitigate the project's impacts to Route 101.

John Speka 7/7/11 P a g e | **2**

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• We request to receive a copy of the adopted findings for this project, prior to certification of the EIR.

Please contact me to receive copies of previous correspondence for this project. We assume that all previous correspondence from Caltrans for State Clearinghouse document number 2006112087 is part of the public record for the project. We look forward to continued collaboration with the County and the applicants as this project progresses. If you have questions or need further assistance, please contact me at the number above.

Sincerely,

Jesse Robertson Associate Transportation Planner District 1 Regional & Community Planning

c: Scott Morgan, State Clearinghouse

2-3

Response to Letter from Jesse Robertson, California Department of Transportation

- 2-1. The comment discusses how highway improvements will be constructed per a Highway Improvement Agreement with Caltrans' oversight of the construction. No response is required as no questions regarding the DEIR are asked.
- 2-2. Caltrans concludes that constructing the highway improvements will adequately mitigate the project's impacts to Highway 101. This confirms the conclusion presented in the RDEIR, so no additional response is required.
- 2-3. The County will comply with this request for findings. As no question is asked regarding the EIR, no additional response is required.



DEPARTMENT OF FORESTRY AND FIRE PROTECTION Mendocino Unit 17501 North Highway 101 Willits, CA 95490 (707) 459-7414 Website: www.fire.ca.gov

Ref: 5000 Resource Management Date: June 29, 2011

Mr. John Speka, Planner Mendocino Co. Dept. of Planning & Building Services 501 Low Gap Road, Room 1440 Ukiah, CA 95482

Project Name: Northern Aggregates Inc., Harris Quarry Expansion Document Type: Revised Draft Environmental Impact Report (RDEIR) Case #: UR 19-83/2005 State Clearinghouse SCH #2006112087 Owner/Applicant: Northern Aggregates, Inc.

Comments from the Mendocino Unit of the California Dept. of Forestry & Fire Protection (CAL FIRE) for this project:

Need for a Timberland Conversion Permit & Timber Harvesting Plan

The portion of the project area designated as the quarry expansion area, as well as a portion of the site of the proposed asphalt plant, may constitute "timberland" as defined in Public Resources Code (PRC) 4526. This area may support commercial species as defined in Title 14 California Code of Regulations (CCR) 895.1 "Commercial Species: Groups A & B". For projects proposing a conversion of timberland to an alternate use, the landowner must submit an Application for Timberland Conversion Permit (CAL FIRE form RM-53) to CAL FIRE as per 14 CCR 1103 (Conversion of Timberland). Timber operations shall not be conducted on timberland proposed for conversion to a use other than the growing of timber unless a Timberland Conversion Permit (TCP) has been issued by the Director of CAL FIRE.

Sudden Oak Death

The project is located within the Board of Forestry & Fire Protection's declared Sudden Oak Death (SOD) zone of infestation. General information about SOD can be found at <u>www.suddenoakdeath.org</u>. Project activity involving the practices of limbing & felling trees and/or processing of logs may result in the spread of SOD throughout the project area during the period of project implementation.

Oak Woodlands

The project may encroach on the oak woodland vegetation type. For purposes of this 3-3 section, "oak" means a native tree species in the genus *Quercus*, not designated as Group

CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN

Page 18

3-2

PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT WWW.CA.GOV.



Ukiah, CA 95482

3-1

A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Public Resources Code (PRC) Section 4526, and that is 5 inches or more in diameter at breast height. As part of the determination made pursuant to PRC 21080.1, the county may require that any significant effect to oak woodlands be mitigated by any number of specified oak woodlands mitigation alternatives. [Ref. PRC 21083.4].

Comments on specific Revised DEIR document sections:

Section 4.3 Biological Resources, A. Setting, 1. Vegetation

(a) Proposed Quarry Expansion Area:

This area contains conifer and hardwood species, including tanoak and madrone, and may be subject to the timberland conversion process.

Proposed Asphalt Processing Facility Site

The text specifies that this area is "....vegetated with open grassland and two oak woodland communities, which transition to the Douglas-fir tanoak forest present on the north-facing ridge." This area may also be subject to the timberland conversion process.

Figure 3-3: Ref. Project Location Processing Plan & description on pgs. 61-62

Impact 4.7-A describes completion of a new 1500-ft length access road between the quarry and the asphalt processing facility. The road is described as paralleling Black Bart Drive for most of the length, partially built and graded under a County-issued grading permit, with the portion that remains to be built located in the heavily wooded area northwest of the existing project access at Highway 101. The location of the proposed road appears to contain both oak woodlands & conifer timberland.

Christopher P Rowney, Chief Mendocino Unit

by:

Louis F. Sciocchetti Division Chief, Forest Practice Registered Professional Forester #2368

Response to Letter from Christopher P. Rowney, California Department of Forestry and Fire Protection (CAL FIRE)

- 3-1. This comment provides information about the requirements for a Timberland Conversion Permit (TCP). This information corresponds to the RDEIR discussion of the permit requirements described on pages 194-195 of the RDEIR. As no questions are asked regarding the EIR, no additional response is required.
- 3-2. This comment provides information about Sudden Oak Death (SOD) and cutting and processing trees on the project site. This information corresponds with the discussion of SOD on page 195 of the RDEIR. As no questions are asked regarding the EIR, no additional response is required.
- 3-3. The comment provides information on the requirements for mitigation because the project would remove native oaks and thus convert oak woodland. This information corresponds to the discussion of impacts to oaks on pages 192-194 of the RDEIR. On page 193, the RDEIR includes mitigation measures consistent with the requirements of Public Resources Code 21083.4. As no questions are asked regarding the EIR, no additional response is required.

State of California

Memorandum

2/8212 7/5/11

To: Bill Holmes, Chief Northern Region Department of Forestry and Fire Protection

> Attention: Environmental Coordinator Mendocino Unit

R13

Date: May 25, 2011

Telephone: (916) 657-0300

From: Department of Forestry and Fire Protection

Allen S. Robertson, Deputy Chief, Environmental Protection

Subject: Environmental Document Review

Project Name: Harris Quarry Expansion Project sCH #: 2006112087 Document Type: Draft Environmental Impact Report (DEIR)

Potential Area(s) of Concern: Fire Protection?; Other: MANDATED DUE DATE: 7/5/2011

STATE CLEARING HOUSE

The above referenced environmental document was submitted to State Headquarters, Environmental 4-1 Protection for review under the California Environmental Quality Act (CEQA) or the National Environmental Policy Act (NEPA). The proposed project, located within your Unit/Program Area, may have an impact upon the Department's fire protection and/or natural resource protection and management responsibilities or require the Department's permits or approval. Your determination of the appropriate level of CAL FIRE involvement with this project is needed. Please review the attached document and address your comments, if any, to the lead agency prior to the due date. Your input at this time can be of great value in shaping the project. If your Unit's Environmental Coordinator is not available, please pass on to another staff member in order to meet the mandated deadline.

Please submit comments directly to the lead agency before the mandated due date with copy to the State Clearinghouse (P.O. Box 3044, Sacramento, CA 95812-3044).

No Comment - explain briefly on the lines below.

Name and Title of Reviewer: <u>Lows Sciecettin</u>

Phone: non) 961-1494 Email: Lou Sciocchetti Cfire.ca.gov

Note: Please complete this form and return it, with a copy of any comments, for CAL FIRE's records to: Ken Nehoda or Allen Robertson, Environmental Protection, P.O. Box 944246, Sacramento CA 94244-2460.

HOWARD N. DASHIELL DIRECTOR OF TRANSPORTATION



COUNTY OF MENDOCINO DEPARTMENT OF TRANSPORTATION

> 340 LAKE MENDOCINO DRIVE UKIAH, CALIFORNIA 95482-9432 (707) 463-4363 FAX (707) 463-5474

> > 21 July 2011

- TO: Roger Mobley, Supervising Planner Department of Planning and Building Services
- FROM: Tom Peters, Deputy Director JCP Department of Transportation
- SUBJECT: USE PERMIT NO. U19-83-05 (NORTHERN AGGREGRATES) PROJECT COORDINATOR – JOHN SPEKA

This memorandum is given to make it clear that the Mendocino Department of Transportation (MDOT) recommends approval and renewal of new/existing aggregate sources and roadway material processing plants within Mendocino County. Over the past 25 years or more these facilities have been steadily decreasing in number due to regulatory constraints, formidable permitting requirements, local opposition, and other reasons.

The scarcity of these local sources, especially hot-mix asphalt has steadily driven up the price of the roadway materials as well as increased the cost of transporting these materials to the job site. On a regular basis MDOT staff has been forced to purchase various asphalt materials from out-of-County sources.

Per County policy, MDOT cannot advocate for specific projects. However, MDOT recommends the approval/renewal of all roadway material source and processing facilities throughout the County that will comply with all the permit and regulatory requirements. A variety of roadway material sources located throughout the County would tremendously help MDOT stretch its scarce maintenance dollars and greatly reduce MDOT diesel emissions.

If you have any questions, please contact me at your convenience.

cc: Howard Dashiell, Director of Transportation UR 19-83-05 FUNCTIONS

Administration & Business Services Airports County Surveyor Engineering Land Improvement Roads and Bridges Solid Waste

Response to Letter from Tom Peters, County of Mendocino Department of Transportation

5-1. The comment states that the Department recommends approval of the project. No questions are asked regarding the RDEIR, so no additional response is required.

From:	Chris Brown
To:	John Speka; Icharles@leonardcharlesandassociates.com
Date:	5/27/2011 8:37 AM
Subject:	Harris

I just read through the Harris EIR (ok only the AQ section - I don't have that much free time).

6-1

I had only one comment - on page 256 there is a discussion of Crystalline Silica The last sentence of this section is confusing and I would suggest the following clarification -

"Crystalline silica has not been identified as a TAC by the California Air Resources Board and therefore it is not specifically regulated by the MCAQMD. "

The confusion arises because OEHHA has identified it as a TAC, but ARB has not.

Christopher D. Brown AICP Air Pollution Control Officer Mendocino County Air Quality Management District 306 E. Gobbi Street Ukiah, Ca 95482 Ph. (707) 463-4354 Fx. (707) 463-5707 Web www.mendoair.org Twitter Mendoair

.....

Response to Letter from Christopher D. Brown, Mendocino County Air Quality Management District

6-1. The clarification recommended by the commenter has been made - see Chapter 3 of this Final EIR for the corrected text. This change does not affect the analyses, mitigations, nor conclusions of the RDEIR.

John Speka - Harris Quarry EIR

From:Carl Magann <c5400willitsfire@sbcglobal.net>To:<spekaj@co.mendocino.ca.us>Date:6/23/2011 11:55 AMSubject:Harris Quarry EIR

Greetings,

All in all the Little Lake Fire Protection District is in favor of the expansion of the quarry which brings a necessary element to Mendocino County. All requirements and or suggestions seem to have been met in the latest EIR.

However, there is some wording in the current draft which needs to be changed. Comments follow;

On Page 360, section 4.8:

The District includes two stations; the main station on East Commercial Street in Willits and a second station on Baechtel Road in Willits. The main station has two Incident Command System (ICS) Type 1 engines, three (actually only one) Type 3 4-wheel drive engines, and one rescue vehicle. The Baechtel Road station has one Type 1 engine, one Type 3 4-wheel drive engine, one 4,000-gallon water tender, and one 75-foot ladder truck. Volunteers include 13 EMTs, and the rest are First Responders.

We look forward to supporting this project to its completion. If we can be of any further assistance please feel free to contact us.

Carl Magann Fire Chief, LLFPD

IF THE RECIPIENT OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION OR COPYING OF THIS COMMUNICATION IS RESTRICTED. IF YOU HAVE RECEIVED THIS ELECTRONIC TRANSMISSION IN ERROR, PLEASE DELETE IT FROM YOUR SYSTEM WITHOUT COPYING IT, AND NOTIFY THE SENDER BY REPLY EMAIL.

Response to Letter from Carl Magann, Little Lake Fire Protection District

7-1. The Fire Chief has stated that there is only one Type 3 4-wheel drive engine at the main fire station instead of three as stated on page 315 of the RDEIR (it is noted that the page number included in this comment is actually on page 319 of the RDEIR). The change has been made as requested – see Chapter 3 for the revised text. This change does not affect the analyses, mitigations, or conclusions of the RDEIR.

455 Capitol Mall, Suite 210 Sacramento, CA 95814

Howard F. Wilkins III cwilkins@rtmmlaw.com

July 20, 2011

VIA E-MAIL AND FEDERAL EXPRESS

Mendocino County Department of Planning and Building Services Attn: John Speka, Planner 501 Low Gap Road, Room 1440 Ukiah, CA 95482

Subject: Comments on the Revised Draft Environmental Impact Report ("RDEIR") for the Harris Quarry Use Permit and Reclamation Plan Project

Dear Mr. Speka:

Remy Thomas Moose_S Manley_{LLP}

> These comments are submitted on behalf of Keep the Code, an unincorporated association of local residents who are concerned about the proposed Harris Quarry Use Permit Project and Reclamation Plan ("Project"). As noted in Keep the Code's prior comment letter, while generally supportive of the current quarry operation, Keep the Code objects to the project's proposed significant adverse impacts resulting from amending the Mendocino County Zoning Ordinance to include a Mineral Processing Combining District that could potentially be overlaid on any land in the County that is zoned rangeland with mineral resources. Keep the Code is also opposed to the dramatically increased annual, seasonal and peak extraction amounts proposed by the project, as well as the inclusion of industrial uses, such as an asphalt batch plant and pavement regrinding facility due to the rural setting of the project and its proximity to residential uses.

The County should not approve the proposed project because it is not consistent with local land uses in that area or the County's General Plan and would result in significant environmental effects that are not disclosed in the RDEIR. This letter details these deficiencies, as well as others, in the RDEIR under the California Environmental Quality Act ("CEQA") (Pub. Resources Code, §§ 21000 et seq.), and the California Code of Regulations, title 14, Section 15000 et seq. ("CEQA Guidelines"). This letter was prepared with input from Richard Haygood P.E. of TJKM Transportation Consultants, air quality consultant Mr. Paul Miller of MEC, Richard Grassetti M.A. of Grassetti Environmental Consulting, and Matt O'Connor PhD CEG of O'Connor Environmental, 8-1

John Speka July 20, 2011 Page 2 of 18

Inc. I have attached letters from these experts illustrating the specific deficiencies identified within the RDEIR. The County must respond separately to each environmental issue raised by these experts on the adequacy of the RDEIR in the Final EIR responses to comments. (CEQA Guidelines, § 15088.)

I. <u>Procedural Matters</u>

A. Inadequate Notice of Availability and Access to Documents Cited in RDEIR

As indicated in my prior letters to the County regarding the Notice Of Completion And Availability Of Revised Draft Environmental Impact Report For The Harris Quarry Expansion (SCH# 2006112087) released by the County on May 16, 2011 (hereafter, "May 16, 2011 NOA"), the May 16, 2011 NOA did not comply with CEQA's requirements that the NOA identify where all documents referenced in the RDEIR are available for public review. Public Resources Code section 21092(b)(1) requires that the CEQA notice for an EIR must include "the address where copies of the draft environmental impact report and all documents referenced in the draft environmental impact report ... are available for review." (Public Resources Code, § 21092(b)(1) (emphasis added).) Section 15087(c)(5) of the CEQA Guidelines states that a Notice of Availability for an EIR shall disclose the following:

> The address where copies of the **EIR and all documents** referenced in the **EIR** will be available for public review. This location shall be readily accessible to the public during the lead agency's normal working hours.

(CEQA Guidelines, § 15087(c)(5) (emphasis added).) County staff and County Counsel have admitted many documents referenced in the RDEIR were not available for review at any of the locations listed in the May 16, 2011 NOA throughout most (if not all) of the comment period. Therefore, the County has failed to proceed in the manner required by law as the May 16, 2011 NOA does not comply with CEQA's statutory requirements. More fundamentally, however, the public, including Keep the Code, has been unable to verify and review many of these documents when preparing its comments on the RDEIR.

B. Inadequate Notice of Public Comment Period and Agencies Consulted.

CEQA requires that EIRs include a list of the state and federal agencies consulted in preparing the document. (Pub. Resources Code, § 21153; CEQA Guidelines, § 15086, subd. (a) (requiring a lead agency to consult with responsible, trustee and any other state, federal and local agencies with jurisdiction by law over the project or which exercise authority over resource that may be affected by the project).) The RDEIR appears to John Speka July 20, 2011 Page 3 of 18

indicate that the County did not consult with several federal and state agencies as required under CEQA, including but not limited to United States Fish and Wildlife Service ("USFWS"), the United States Army Corps of Engineers (the "Corps"), and the National Marine Fisheries Service ("NMFS"), and the California Department of Conservation ("DOC"). (See RDEIR, p. 397.) What consultation occurred between these agencies and the County? What dates where these agencies consulted and what were the results of any such consultations?

Was the RDEIR circulated to all federal agencies which have jurisdiction over the project or which exercise authority over resources which may be affected by the project? (See CEQA Guidelines, § 15086.) These agencies include the United States Fish and Wildlife Service ("USFWS"), the United States Army Corps of Engineers (the "Corps"), the Environmental Protection Agency ("EPA") and the National Marine Fisheries Service ("NMFS"). (See RDEIR, p. 6.) Please identify the date when each of these federal agencies were sent a copy of the RDEIR?

Finally, the CEQAnet database erroneously states the end of the public review and comment period was July 5, 2011, rather than July 21, 2011, the actual deadline. The public and state agencies, therefore, were misinformed of the correct deadline for submission of written comments to the County. Therefore, the County may have received additional comments from the public and agency representatives had they been properly informed of the comment period. The RDEIR should be re-circulated to the public and all required government agencies (including the Federal agencies listed above) as required by CEQA with accurate information on the deadline for public comment and location of documents cited in the RDEIR.

II. The Project Description Included in the RDEIR is Deficient under CEQA.

An accurate, stable and finite project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity. (See San Joaquin Raptor Rescue Center v. County Of Merced (2007) 149 Cal.App.4th 645, 655 (Raptor); McQueen v. Board of Directors of the Midpeninsula (1988) 202 Cal.App.3d 1136, 1143; County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 193 (County of Inyo) (an accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR).)] The RDEIR's description of the project omits critical information and fails to meet this standard and therefore must be revised and re-circulated.

First, the RDEIR's project description fails to adequately disclose the status of the Harris Quarry's current operations. The RDEIR states that "in 1990, the permit modification #UM 19-83/90 allowed for a one-time extraction and processing limit of 125,000 cubic yards of rock." (RDEIR, p. 63.) It then goes on to state that "the permit otherwise provides for an annual 75,000 in situ cubic yard extraction rate, which is the

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current annual production rate." (*Ibid.*) These two statements appear contradictory and must be explained to provide the public and decisionmakers with relevant information to assess the project. Does the current permit for the Quarry actually state that the permitted extraction rate is 75,000 in situ cubic yards? When was the in situ extraction rate versus mined material distinction first approved by the County as the method for calculating the permitted mining level for the Project?

The Project Description must disclose the length of the prior and/or current permit, the daily and annual and total extraction limits under the permit, and its expiration date. Without this information, one could assume that the permit only allowed extraction and processing of 125,000 cubic yards of rock and once this amount was mined the permit expired. The RDEIR must also disclose whether the project is currently operating with or without a permit or in excess of permitted operations.

Keep the Code's prior inquiries indicate that the project is currently operating without a permit. Has any CEQA review been conducted for the current operations at the Quarry? Does the County acknowledge that the Harris Quarry is currently operating without a permit? Has the County imposed any conditions or mitigation on the current operations at the Quarry to protect the environment? If yes, please describe? If no, why not?

Does the County acknowledge that the current operation of the Harris Quarry without a permit violates SMARA? If not, why? Has the County conferred with Department of Conservation regarding the status of the current Harris Quarry permit? If yes, when and are these consultations documented?

Please describe the County's policy relating to when unpermitted mining operations are allowed to operate? Did the County enforce this policy with respect to Harris Quarry over the past five years?

Does the County intend to provide meaningful enforcement mechanisms if it approves a new permit and mining operations continue after the new permit expires? If yes, what enforcement measures are proposed? If not, why? What evidence supports the conclusion that future non-compliance with permitting requirements will be treated differently by the County?

The amount of annual extraction amounts under the prior/current permit must be included in the RDEIR to enable the public and agencies to adequately evaluate the project's baseline. Correspondence in the County's files indicates that the Quarry has exceeded its annual permitted extraction amounts under the prior/current permit. What enforcement actions did the County take in relation to the noted permit violations? What enforcement mechanisms does the County intend to include for the current project to ensure such violations do not occur for the proposed project?

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What evidence supports the assumptions regarding average and maximum daily 8-12 production rates? What years were used to compute the average and maximum daily production rates used as the baseline in the RDEIR? Were the average and maximum daily production rates used as the baseline in the RDEIR evaluated in the County's prior CEQA analysis of the Harris Quarry?

How many days did the Harris Quarry operate in 2010? What was the total 8-13 amount of mined material at the Harris Quarry in 2010? What was the highest amount of mined material on a single day in 2010?

Have the average and maximum daily production rates for the Harris Quarry ever 8-14 undergone CEQA review by the County? What average and maximum daily rates were 8-15 evaluated by the County in prior CEQA review? When were these rates evaluated? What mitigation measures imposed by the County in its prior CEQA review are part of the current project's baseline? What proposed mitigation measures are new? Does 8-16 current/prior permit provide for daily maximum rates of extraction? Will the new permit provide daily maximum rates of extraction? How will any such maximum rates be enforced? Does the RDEIR's project baseline include information from sites other than the project site (e.g. emissions and truck trips from the applicants wash facility and concrete plant)? If yes, what assumptions were made relating to the use of information from others sites to establish the baseline for the project and project site (e.g. water use; air quality modeling; length of truck trips, number of delivery trucks)? What evidence supports these assumptions?

The project description does not describe the maximum production rate for the proposed asphalt plant. What was the maximum daily production rate used calculate the asphalt plant's daily air quality emissions? Is there a condition of approval that will limit the maximum daily rate to that amount? As noted it Paul Miller comments the asphalt plant appears to be oversized. Please describe the reason for the proposed size of the asphalt plant. Is the applicant willing to commit to not proposing an increase in the asphalt plant production that would be binding throughout the life of the project? If not, the project must evaluate full production at the asphalt plant as part of the cumulative analysis.

Second, the proposed Mineral Processing Combining District would allow both asphalt and concrete batch plants at the project site. While a concrete batch plant is currently not proposed as part of the project in the RDEIR, the Applicant has proposed such a use on the site previously. Therefore, such a potential use is foreseeable and should have been analyzed in the RDEIR. Similarly, as discussed in other comments it is foreseeable that the Mineral Processing Combining District would be used at other current and proposed future aggregate sites within the County. Therefore, the Mineral Processing Combining District should have been analyzed at a programmatic level and programmatic mitigation should have been proposed for any potential impacts.

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These errors are fatal to the adequacy of the RDEIR. Under CEQA, the project 8-21 refers to the underlying "activity" for which approval is being sought. (CEQA Guidelines, § 15378, subd. (c).) "The entirety of the project must be described, and not some smaller portion of it." (Raptor, supra, 149 Cal.App.4th at p. 644, citing Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 829-831 [EIR for mining operation failed to include extension of water facilities, obscuring from view an important aspect of the project].) The primary harm caused by "the incessant shifts among different project descriptions" is that the inconsistency confuses the public and commenting agencies, thus vitiating the usefulness of the process "as a vehicle for intelligent public participation." (County of Inyo, supra, 71 Cal.App.3d at pp. 197-198.) "[O]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives" (City of Santee v. County of San Diego (1989) 214 Cal. App. 3d 1438, 1454.) The RDEIR does not.

CEQA Guidelines section 15120 states that the RDEIR shall contain all of the information required by sections 15122 through 15131 of the CEQA Guidelines. (CEQA Guidelines, § 15120, subd. (c).) If the information provided in the RDEIR fails to comply with these requirements, then mepage-30 blic review may be precluded to the extent that the RDEIR lacks the basic and properties of an adequate draft environmental document. (See CEQA Guidelines, § 15088.5, subd. (a)(4); Cadiz Land Co. v. Rail Cycle (2000) 83 Cal.App.4th 74, 96; Save Our Peninsula Committee v. Monterey County Bd. of Supervisors (2001) 87 Cal.App.4th 99, 134 (Save Our Peninsula Committee).) As detailed herein, the RDEIR does not meet these requirements and precludes meaningful public review. Under these circumstances, the defects cannot be cured without recirculating a second revised DEIR for public review and comment prior to certification. (*Ibid.*).

III. <u>The Environmental Baseline Used For the RDEIR Ignores and</u> <u>Understates the Significant Environmental Effects of the Project.</u>

As addressed above and in Keep the Code's expert comments, major deficiencies 8-23 exist in the project description and RDEIR description of the current environmental setting. "Before the impacts of a project can be assessed and mitigation measures considered, an EIR must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined." (CEQA Guidelines, §§ 15125, 15126.2, subd. (a).) (County of Amador v. El Dorado County Water Agency (1999) 76 Cal.App.4th 931, 952.) According to Guidelines section 15125, subdivision (a): "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation John Speka July 20, 2011 Page 7 of 18

is published..." (*Ibid.*) As a result of the RDEIR's inadequate project description, it is very difficult if not impossible to determine the project's baseline as addressed herein.

Significantly, the RDEIR analysis of potential daily impacts is based on estimated 8-24 baseline production levels for the current operations at the processing facility and is without any factual support in RDEIR. (See e.g., RDEIR, p. 263.) What were the production rates and how many truck trips were used to represent daily baseline emissions in Table 4.6-5. What current mitigation measures or conditions of approval 8-25 apply to the current operation of the project. Did the County include all these prior mitigation measures, conditions, and requirements when calculating baseline air emissions? How many days during 2010 did the Harris Quarry operate at the levels used 8-26 to estimate baseline emissions? How many days did it operate at a higher level than baseline assumptions in 2010? How many days did the quarry operate at a lower level than baseline assumptions in 2010? This unsupported baseline also appears to skew the 8-27 project's air quality impacts by not accounting for the 118 days of significant air quality impacts where currently there are none. How does the RDEIR evaluate and mitigate daily impacts that exceed the RDEIR's impact thresholds on those days when the project does not currently operate?

The project similarly uses an inaccurate baseline for truck trips. As noted 8-28 addresses in the comment from Richard Haygood, P.E., of TJKM Transportation Consultants, the baseline for truck trips is not supported by substantial evidence. Consequently, several of the RDEIR's conclusions regarding potential impacts are understated.

As identified below, the RDEIR fails to provide any baseline information for the certain impact section including but not limited to biological resources, water quality and hydrology. (See CEQA Guidelines, §§ 15151, 15152, 15144 (requiring lead agency to "use its best efforts to find out and disclose all that it reasonably can"); *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 873-874 (*Friends of the Eel River*)(requiring consideration of historical levels of river diversions and noting that an EIR must demonstrate consideration of significant environmental impacts within the full environmental context and affording the fullest possible protection to the environment).) The RDEIR's approach constitutes an abuse of discretion under CEQA by omitting relevant evidence and precluding informed decision-making and public participation. (*Raptor, supra*, 149 Cal.App.4th at p. 659 ("An omission of baseline assumptions in an environmental impact report (EIR) falls short of the requirement of a good faith effort at full disclosure.")

While a lead agency has discretion to choose between conflicting expert opinions or differing methodologies in an effort to select an appropriate environmental baseline. The EIR, however, "must set forth any analysis of alternative methodologies early enough in the environmental review process to allow for public comment and response." (Save Our Peninsula Committee, supra, 87 Cal.App.4th at p. 120.) As noted above the John Speka July 20, 2011 Page 8 of 18

RDEIR does not. Moreover, as in Save Our Peninsula Committee, the applicant has an economic incentive to try to establish a high baseline in order to maximize its permit levels. There is no evidence establishing baseline conditions in the RDEIR. Purported evidence of the baseline must be supported by more than "unsubstantiated opinion or narrative." (*Id.* at p. 122.) What efforts has the County made to verify the baseline assumptions contained in the RDEIR for each resource area?

Finally, as explained in a recent Court of Appeal decision on a mining project:

The decision makers and general public should not be forced to sift through obscure minutiae or appendices in order to ferret out the fundamental baseline assumptions that are being used for purposes of the environmental analysis. "An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Laurel Heights Improvement Assn. v. Regents of University* of California, supra, 47 Cal.3d at p. 405.) "The data in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project." (Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova, supra, 40 Cal.4th at p. 442.)

This failure to clearly and conspicuously identify the baseline assumptions for purposes of describing the existing environmental setting further degraded the usefulness of the EIR and contributed to its inadequacy as an informational document. Accordingly, we hold that in any new EIR prepared in connection with this proposed Project, the baseline must not be obscured, but must be plainly identified in the EIR.

(Raptor, supra, 149 Cal.App.4th at p. 659 (emphasis added.) The RDEIR fails to meet this standard.

IV. <u>Consideration of the Proposed Project's Effects on Hydrology and Water</u> Ouality is Inadequate.

The RDEIR fails to accurately describe and consider the direct and indirect effects 8-32 of the proposed project on water quality and water supply. Impact 4.2-A of the RDEIR concludes, for example, that the proposed project will result in less-than-significant

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impacts, after mitigation, to water quality. (RDEIR, pp. 146-159.) The RDEIR does not include information natural and current water quality information in its environmental setting and fails to include baseline information on water quality. Moreover, instead of including baseline information on water quality, the RDEIR proposes that the applicant collect the baseline information as mitigation for the project. (RDEIR, p. 156.) After collecting the baseline information, the RDEIR proposes as mitigation that the applicant follow the Regional Water Quality Control Board's (RWQCB) requirements for preparing a SWPPP for the project. (Ibid.) Setting aside the fact that this is impermissible deferred mitigation as addressed below, more importantly this is not adequate mitigation because the project may still significantly impact water quality even if a legally adequate SWPPP is proposed and approved. Again, without adequate baseline information, it is impossible to evaluate whether this is the case. The RDEIR recognizes this possibility in Mitigation Measure 4.2-A.3, and proposes to reduced production if the water quality improvements cannot be met. (RDEIR, p. 157.) The RDEIR does no describe how reducing production would result in compliance with water quality objective. This does not meet CEQA's requirements.

The water quality mitigation is also inadequate because it is based on the expired NPDES General Industrial Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) (Order No. 97-03-DWQ). The mitigation must be revised based on the proposed new industrial permit and other objective criteria. (See <u>http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml</u>.)

Second, the County failed to conduct a water supply assessment as required by CEQA. SB 610 requires the preparation of "water supply assessments" as part of the CEQA process. Section 10910 of the Water Code, enacted as part of SB 610, provides that any county that determines that a "project," as defined in Section 10912, is subject to CEQA must comply with the SB 610 requirements. (Wat. Code, § 10910, subd. (a).) The Harris Quarry Expansion is a "project" as defined in Section 10912, because it occupies more than 40 acres of land. (Wat. Code, § 10912, subd. (a)(5); *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866.) This error can only be remedied by recirculating the RDEIR with an adequate water supply assessment.

Finally, the RDEIR analysis of the project's impacts on groundwater resources is inadequate. The proposed water usage for the expanded quarry appears to be understated. What efforts has the County made to confirm the water usage assumptions contained in the RDEIR? While the Hydrology Chapter indicates there will be adequate water for the project and that the project will not impact groundwater supplies, this conclusion is directly contradicted in the Public Services & Utilities Chapter. Impact 4.8-D indicates that the applicant may need to purchase off-site water as they have in the past. (RDEIR, p. 322.) Ironically, Mitigation Measure 4.8-D.1 requires the quarry to cease operation if the applicant cannot provide 7,200 gallons of water per day. However,

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the assumptions for peak water demand only assume the need for 2,400 gallons of water per day. These inconsistencies further demonstrate why CEQA requires an independent water supply assessment as discussed above. The EIR inexplicably fails to identify alternative supplies of water should they prove necessary as requested by the Mendocino County Water Agency. (Mendocino County Water Agency comment letter on NOP for the Harris Quarry Expansion, p. 1.) This failure cannot be remedied without examining the potential environmental impacts of obtaining alternative sources of water. (See Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 434 (Vineyard).)

In sum, the RDEIR's analysis of the project impacts on water quality and hydrology is incomplete and utterly inadequate. In fact, the RDEIR acknowledges that it does not have sufficient information to evaluate many of the potential impacts. An EIR must consider a worst case analysis scenario of this potentially significant short-term effect resulting from project under CEQA. "CEQA places the burden of environmental investigation on government rather than the public," and an agency "should not be allowed to hide behind its own failure to gather relevant data." (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311 (*Sundstrom*).) The RDEIR impermissibly fails to establish a proper baseline under CEQA from which to evaluate the proposed project's environmental effects; thus, skewing the entire analysis within the RDEIR. (CEQA Guidelines, § 15063, subd. (d)(2), 15144.) Any conclusion by the County that substantial evidence supports a finding of less-than-significant impacts to the hydrology is therefore not supported by the evidence. (*See San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729.)

V. <u>Consideration of the Proposed Project's Effects on Traffic and</u> <u>Circulation is Inadequate.</u>

As addressed above, the project uses an inaccurate baseline for truck trips. The project's baseline assumptions are not supported by substantial evidence and inconsistent throughout the RDEIR as stated in Mr. Richard K. Haygood's letter dated July 20, 2011. Again, this makes it impossible for the public to intelligently comment on the RDEIR. The Haygood comment letter provides further evidence of this problem explaining how missing information and unsupported assumptions made it difficult for even an experienced traffic engineer to figure out the RDEIR's analysis. (Haygood letter, July 20, 2011.) Mr. Haygood's comments regarding traffic safety, VMT, and unsupported assumptions throughout this chapter must also be addressed.

The traffic and circulation section also fails to address the project's impacts on traffic on Highway 101 in Willits during peak hours. As the project will increase the number of truck trips on several such intersections which are at level of service "F" or unacceptable service levels within Willits, the project may have a significant impact on

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these intersections. This potentially significant impact must be evaluated and the RDEIR should propose mitigation as required under CEQA, such as limiting the number of truck trips during peak hours.

Finally, it is unclear if the RDEIR followed the "Caltrans Guide for the Preparation of Traffic Studies (Caltrans Guide) in preparing the traffic studies for the project. (See Department of Transportation letter on NOP for Harris Quarry Expansion, September 3, 2010.) Did the all the traffic studies follow the Caltrans Guide? If not, why not? Please also describe how the County has complied with the Caltrans PEER process for the project. The EIR should disclose the heightened requirements of the process.

Other comments have requested information such as information regarding the timing and number of deliveries, employee trips, etc. This information should also be included in the projects baseline for truck trips as it relates to this section as well as the project's impacts on air quality and energy use.

The Conclusions in the RDEIR Regarding Impacts to Air Quality Is VI. Inadequate.

8-45 In addition to the baseline concerns regarding air quality addressed above, the RDEIR's analysis of air quality impacts has many additional inadequacies. As addressed in Mr. Miller's July 17, 2011 letter, the RDEIR's discussion and assessment of direct air quality emissions from the project is completely deferred until the permitting action by the Mendocino County Air Quality Management District (MCAQMD). (Miller letter, July 17, 2011, p. 1.) This is impermissible under CEQA.

The RDEIR must also reexamine the project's air quality impacts to evaluate the 8-46 whether the project's maximum daily emissions from both direct and indirect sources will result in a significant environmental impacts. Currently, the RDEIR only evaluates direct emissions on an annual basis. While this may be consistent with the MCAQMD Significance Criteria, it is not consistent with CEQA requirements. Without assessing direct and indirect emission together, the public and decisionmakers are not apprised of the full environmental consequences of the project. For example, direct and indirect NOx 8-47 emission for the proposed project are 463.4 lb./day, which is ten times the threshold for NOx. (RDEIR, p. 276.) While the proposed project does acknowledges that 2010 NOx indirect emissions of 179.7 lb./day are significant, it minimizes this effect stating that long-term the effect will be less than significant. (RDEIR, p. 281.) However, when considering direct and indirect emission together, the long-term NOx emissions are still more than triple the level of significance. Nonetheless, the RDEIR does not propose 8-48 mitigation for this significant impact either short or long-term. If on-site NOx emission mitigation is not feasible the RDEIR should address off-site mitigation opportunities.

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The RDEIR must be revised and re-circulated based on an accurate estimate of truck trips to disclose that diesel particulate matter (from diesel engines, including trucks) has the potential to cause cancer and the project will result in a large increase of diesel trucks in the project area. (Ibid.) The failure to disclose this significant environmental impact and health risk violates CEQA. (See Berkeley Keep Jets over the Bay Committee v. Board of Port Commissioners (2001) 91 Cal.App.4th 1344, 1370 [Requiring further analysis because "[a]t the very least, the documents submitted by the public raised substantial questions about the project's effects on the environment and the unknown health risks to the area's residents."]

Finally, as explain by Mr. Miller, Table 4.6-21 shows that total indirect GHG emissions of the project would be 1,821 CO2 MT per year. This exceeds the threshold (1,200 MT of CO2e/year) identified in Table 4.6-8 for projects other than stationary sources. This is a significant GHG impact of the project that should be identified in the second Revised DEIR. (Miller letter, July 17, 2011, p. 1.) These impacts were not disclosed to the public and this needs to be corrected in compliance with the CEQA by revising and recirculating the RDEIR.

The RDEIR's Treatment of Cumulative Impacts Is Cursory at Best. VII.

The cumulative impacts analysis contained within the RDEIR does not include the 8-51 level of detail required by CEQA. The RDEIR has not evaluated the cumulative impacts of "related past, present, and reasonably foreseeable probable future projects" compound or increase the project's environmental impacts. (CEQA Guidelines, § 15355, subd. (a).) Instead, the project has narrowly focused its analysis on possible future projects. (See RDEIR, p. 18.) The County suggests that complying with CEQA cumulative impact requirements would be meaningless here and takes its own approach. However, the County must comply with CEQA requirements for analyzing cumulative impacts.

8-52 Finally, as the County has directed that the cumulative impact analysis in the RDEIR assume that future expansion of the project would have approximately the same footprint as assessed in the original DEIR, the RDEIR states that it assesses the long-term (after the 30-year Use Permit expires) impacts of the project as proposed plus development of the larger quarry footprint as it was identified and assessed in the original Draft EIR. (See RDEIR, p. 98.) However, no meaningful information or analysis is provided in the RDEIR's cumulative analysis to assess cumulative impacts from based on the original 8-53 footprint. We incorporate by reference our comment letter on the original Draft EIR as well as other comments relating to hydrology, biological resources, and water quality issues associated with the original proposed footprint. These issues must be addressed in the second RDEIR.

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VIII. <u>Consideration of the Proposed Project's Effects on Plan Consistency and</u> Land Use is Inadequate.

The RDEIR acknowledges that the proposed project, including the Mineral Processing Combining District, is inconsistent with numerous General Plan policies including DE-1, DE-57, DE-85, RM-42, RM-47, and RM-128. (RDEIR, pp. 349-355.) Moreover, the RDEIR consistency determination regarding other General Plan policies is incomplete and/or irrational. Notably, the RDEIR only evaluates the proposed zoning change as it relates to the Project property and fails to evaluate whether the Mineral Processing Combining District would be inconsistent on other Rangeland designated properties in the County with mineral resources. In addition, the proposed Mineral Processing Combining District would allow concrete batch plants, but the RDEIR fails consider any potential impacts from this change. The Mineral Processing Combining District ordinance would allow heavy industrial uses (e.g. manufacturing of asphalt and concrete) on land designated in the General Plan as "RL-Range Lands" and with an R-L zoning designation. As the RDEIR notes the uses permitted under the General Plan for "RL" designated land are limited to: "Residential uses, agricultural uses, forestry, cottage industries, residential clustering, uses determined to be related to and compatible with ranching, conservation, processing and development of natural resources, recreation, utility installations." (RDEIR, pp. 350-351.) The RDEIR suggests that asphalt batch plants (and possibly concrete manufacturing plans) appear to be "related to and compatible with" processing and development of natural resources and therefore should be determined to consistent with the present land use designation. Such an interpretation would turn the General Plan on its head. For example, an oil refinery would similarly be related to and compatible with oil and gas drilling operations. This is clearly not consistent with the intent behind this land use category as specified in the General Plan:

Intent: The Range Lands classification is intended to be applied to lands which are suited for and are appropriately retained- for the grazing of livestock. The classification should include land eligible for incorporation into Type II agricultural preserves, other lands generally in range use, intermixed smaller parcels and other contiguous lands, the inclusion of which is necessary for the protection and efficient management of range lands. The policy of the County and the intent of this classification shall be to protect these lands from the pressures of development and preserve them for future use as designated. 8-54

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There are many quarry sites that could request a heavy industrial mineral processing zone overlay. This proposed heavy industrial use zoning for resource lands involves the entire county and is inappropriate and unwanted by the majority of county citizens. Asking residents to accept such heavy industrial zoning changes after they have already made life decisions based on where they live is unfair. Particularly when considering that the zoning code already allows two feasible options: heavy industrial zoning sites (in fact the applicant has a Shell Lane location in Willits for their current cement plant operations), and project specific mineral processing (e.g. asphalt and cement) is allowed on a temporary basis adjacent to a project (like the Willits Bypass).

Government Code section 65860, subdivision (a) prohibits enactment of a zoning ordinance inconsistent with a County's general plan. (Gov. Code, § 65860, subd. (a); see also *City of Irvine v. Irvine Citizens Against Overdevelopment* (1994) 25 Cal.App.4th 868, 876.) Section 65860 further states that a zoning ordinance shall be consistent with a city or county general plan only if the various land uses authorized by the ordinance are compatible with the objectives, policies, general land uses, and programs specified in the plan. (Gov. Code, § 65860, subd. (a)(2).)

The RDEIR does not appear to indicate that the applicant has requested a General 8-59 Plan amendment. Without such an amendment, we fail to see how the County can approve the project.

IX. The Proposed Mitigation Measures are Inadequate under CEOA.

The County should have included the Mitigation Monitoring and Reporting Program as part of the RDEIR (rather than the Final EIR as the County proposes), to afford the public and responsible agencies with an opportunity to comment on the adequacy of the mitigation measures. (CEQA Guidelines, § 15074, subd. (d), 15097, subd. (a); Pub. Resources Code, § 21081.6.) Instead, the County chooses to release the Program as part of the Final EIR when additional time for public comment is generally not provided.

The RDEIR's attempt to rely on mitigation measures that "may be" included in future permits issued by the USACOE, CDF, RWQCB and the MCAQMD as a basis for concluding that the project's impacts will be reduced to a less than significant level is not permitted by CEQA. (Sundstrom v. County of Mendocino, supra, 202 Cal.App.3d 296; Quail Botanical Gardens Foundation, Inc. v. City of Encinitas (1994) 29 Cal.App.4th 1597, 1604; Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359.) The formulation of mitigation measures cannot be deferred. (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).) 8-57

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In addition to the problems with the mitigation measure identified above, the RDEIR includes other inadequate mitigation measures are proposed in the RDEIR including:

(1) 4.6-B.1 The applicant shall not emit criteria pollutants beyond the levels described and analyzed in this EIR. The Mendocino County Air Quality Management District (MCAQMD) shall not issue an Authority to Construct and a Permit to Operate if the equipment installed would cause the emission of pollutants that exceed the levels analyzed herein. If the MCAQMD determines that the final list of equipment and/or the proposed hours of operation per day and per year of any of the equipment would exceed the levels assessed in this EIR, then additional CEQA analysis would be required to assess the air quality and health impacts of that final list of equipment and operating hours prior to considering whether to issue the Authority to Construct and a Permit to Operate.

4.6-B.2 MCAQMD will review the final list of equipment and the analysis in this EIR and add any additional equipment or operation mitigations that the District finds are needed to avoid air quality standard exceedances and conform to all District, State, and Federal air quality standards and requirements.

In short, the RDEIR violates a fundamental principle of CEQA by improperly basing the RDEIR on the presumed success of mitigation measures that have yet to be formulated. Each "public agency is required to comply with CEQA and meet its responsibilities, including evaluating mitigation measures and project alternatives." (*Citizens for Quality Growth v. City of Mt. Shasta, supra*, 198 Cal.App.3d at p. 442, citing CEQA Guidelines, § 15020.) Therefore, the RDEIR cannot defer the formulation of mitigation measures to another state or federal agency to ensure that contamination does not occur.

The RDEIR's mitigation measures are reminiscent of the facts in Sundstrom v. County of Mendocino, supra, 202 Cal.App.3d at p. 307. In that case, the Court of Appeal faulted the respondent county for assuming that various other agencies would be able to devise a means of avoiding potentially significant impacts associated with soil stability, erosion and flooding because there was no certainty that success could be achieved. The agency, therefore, was found to have no basis for finding that the project's impact would be insignificant: (Id. at pp. 306-314.)

As explained in Federation of Hillside and Canyon Associations v. City of Los Angeles (2d Dist. 2000) 83 Cal.App.4th 1252 mitigation measures must be "incorporated into the project or required as a condition of project approval in a manner that [would] ensure their implementation." (Id. at p. 1262 (italics added).) Thus the RDEIR violates CEQA because is written in a manner that makes it impossible to ensure their implementation. (See *ibid.*; see also Pub. Resources Code, § 21081, subd. (a)(1); CEQA Guidelines, § 15091, subd. (a)(1)). 8-62

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4.4-B.2 Project-generated traffic shall not result in unsafe operational (2) conditions near the project site as determined by the Mendocino County Department of Transportation and Caltrans. To ensure conformance with this performance standard, the following shall be done:

Again, the RDEIR cannot defer the formulation of mitigation measures to another state or federal agency to ensure that the project's impacts on traffic safety are less than significant. While the mitigation measure states there is a performance standard, the standard is simply the agency's discretionary decision regarding safety, no objective or enforceable criteria are provided.

The RDEIR Fails to Consider A Reasonable Range Of Alternatives. X.

The RDEIR must "describe a range of reasonable alternatives to the project, or to 8-66 the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of alternatives." (CEQA Guidelines, § 15126.6; Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 566.) The alternatives must be described in sufficient detail to serve the informational purpose of the report to the governmental body which will act and the public which will respond to the action through the political process. (City of Rancho Palos Verdes v. City Council (1976) 59 Cal.App.3d 869, 892.) As explained above, the RDEIR's shifting project description makes it impossible to evaluate the proposed alternatives.

The RDEIR fails to include several suggested alternatives proposed by comments. 8-67 CEQA precludes the County from approving the project as proposed because there are feasible alternatives that would substantially lessen the significant environmental effects of the project. (Pub. Resources Code, § 21002.) CEQA does not distinguish between alternatives at single or separate locations. As explained by the Supreme Court in Laurel Heights v. Regents of the University of California (1988) 47 Cal.3d 376, 404-406, an EIR is required to explain in detail why various alternatives were deemed infeasible, and should explore the potential to locate the project somewhere other than proposed.

What efforts were made to locate an alternative site for the project other than contacting the owner of the Blue Ridge Rock Quarry and contacting a realtor about available MLS listing for industrial sites? What efforts were made to locate other possible quarry sites within the County? Who was consulted and when was the search conducted? What information was used to determine potential other quarry sites, or industrial plants sites, particularly those sites that are currently zoned industrial?

Alterative 6 should consider the possible placement of smaller asphalt (possibly temporary facilities) in both Ukiah and Willits as this would address the RDEIR's concerns that placement of the entire project at any location other than the proposed site

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would increase truck trips. This alternative would also likely reduce the projects significant impacts, including but not limited to air quality impacts and energy use.

In addition, the alternatives analysis is based on an unduly narrow interpretation of the project objectives as addressed in Mr. Grassetti's letter. As further explained in Mr. Grassetti's letter the County's Alternatives analysis must be revised and re-circulated because it does not meet CEQA requirements. In fact, the County's speculative assumptions regarding the Willits bypass alone require recirculation of this analysis. (See also Paul Miller letter addressing assumptions in Alternatives analysis).

CEQA requires the County, moreover, to prepare a revised DEIR that meaningfully considers the suggested alternatives in detail. (Friends of the Eel River, supra, 108 Cal.App.4th at p. 873 (holding that because the discussion of alternatives omitted relevant, crucial information, it subverted the purposes of CEQA and was legally inadequate).) A proper discussion of alternatives should provide sufficient "information to the public to enable it to understand, evaluate, and respond" to the agency's conclusion. Stated differently, the discussion should "contain facts and analysis, not just the agency's bare conclusions or opinions," and should include "meaningful detail." (*Id.* at pp. 404-406.) As explained in *Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167, 1180–1183 (*Goleta I*) assertions that a particular alternative is economically infeasible simply because it would be more expensive or less profitable to the private applicant are not adequate. "In the absence of comparative data and analysis, no meaningful conclusions regarding the feasibility of the alternative could have been reached." (*Id.* at pp. 1180–1181.) The Court of Appeal added that:

The fact that an alternative may be more expensive or less profitable is not sufficient to show that the alternative is financially infeasible. What is required is evidence that the additional costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project.

(*Ibid.*) Because the RDEIR fails to provide substantial evidence supporting a finding of infeasibility for any suggested alternatives and rejects out of hand the possibility of locating the asphalt plants at a separate location, additional analysis is required before the Board may approve the project. (Pub. Resources Code, § 21002; *Sierra Club v. Gilroy City Council* (1990) 220 Cal.App.3d 30, 31.)

XI. <u>Conclusion</u>

We urge the County to weigh seriously the concerns voiced by the Keep the Code. 8-72 The Board should direct staff to prepare a second revised DEIR to address the deficiencies identified herein and by other commenters. Thank you for the opportunity to

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comment on the RDEIR and for your consideration of the above matters. If the County decides to approve the project and certify the EIR, please send me a copy of the Notice of Determination ("NOD") immediately upon filing. (Pub. Resources Code, §§ 21152; 21167, subd. (f).)

Very truly yours,

Howard F. Wilkins III

Encls.

cc: Richard Haygood Paul Miller Richard Grassetti Matt O'Connor Keep the Code

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February 14, 2008

VIA E-MAIL AND FEDERAL EXPRESS

Ignacio Gonzalez Project Planner County of Mendocino Department of Planning and Building Services 501 Low Gap Road, Room 1440 Ukiah, CA 95482

Subject: Comments on the Draft Environmental Impact Report ("DEIR") for the Harris Quarry Use Permit Project

Dear Mr. Gonzalez:

These comments are submitted on behalf of Keep the Code, an unincorporated association of local residents who are concerned about the proposed Harris Quarry Use Permit Project ("Project"). While generally supportive of the current quarry operation, Keep the Code objects to the project's proposed significant adverse impacts resulting from the change in the zoning ordinance that would allow industrial uses in rural rangeland zones, dramatically increased annual, seasonal and peak extraction amounts, the proposed lifetime of the quarry (90 years) mining permit, and inclusion of industrial uses, such as an asphalt batch plant, pavement regrinding facility, and cement plant.

The County should not approve the proposed project because it is not consistent with local land uses in that area or the County's General Plan and would result in significant environmental effects that are not disclosed in the DEIR. This letter details these deficiencies, as well as others, in the DEIR under the California Environmental Quality Act ("CEQA") (Pub. Resources Code, §§ 21000 et seq.), and the California Code of Regulations, title 14, Section 15000 et seq. ("CEQA Guidelines"). This letter was Ignacio Gonzalez February 14, 2007 Page 2 of 25

prepared with input from professional engineer, Gary E. Kruger, P.E., of TJKM Transportation Consultants, Mr. Paul Miller, of MEC, air quality and noise consultant, and Peter R. Baye, Ph.D., a Botanist and Coastal Plant Ecologist. These experts have already submitted letters illustrating the specific deficiencies identified within the DEIR. The County must respond separately to each environmental issue raised by these experts on the adequacy of the DEIR in the Final EIR responses to comments. (CEQA Guidelines, § 15088.)

I. Procedural Matters

A. Inadequate Notice of Public Comment Period and Agencies Consulted.

CEQA requires that EIRs include a list of the state and federal agencies consulted in preparing the document. (Pub. Resources Code, § 21153; CEQA Guidelines, § 15086, subd. (a) (requiring a lead agency to consult with responsible, trustee and any other state, federal and local agencies with jurisdiction by law over the project or which exercise authority over resource that may be affected by the project).) The DEIR appears to indicate that the County did not consult with several federal and state agencies as required under CEQA, including but not limited to United States Fish and Wildlife Service ("USFWS"), the United States Army Corps of Engineers (the "Corps"), and the National Marine Fisheries Service ("NMFS"), the California Department of Fish and Game ("DFG"), and the California Department of Conservation ("DOC"). (See DEIR, p. 361.) What consultation occurred between these agencies and the County? What dates where these agencies consulted and what were the results of any such consultations? The federal agencies must also consult amongst themselves. Does the County have any information on whether any such consultation has taken place in relation to the project?

Was the DEIR circulated properly to the federal agencies which have jurisdiction over the project *or* which exercise authority over resources which *may* be affected by the project? (See CEQA Guidelines, § 15086.) These agencies include the United States Fish and Wildlife Service ("USFWS"), the United States Army Corps of Engineers (the "Corps"), and the National Marine Fisheries Service ("NMFS"). (See DEIR, p. 34.) CEQA requires the County to consult with these federal agencies. (CEQA Guidelines, § 15086.)

Finally, the CEQAnet database erroneously states the end of the public review and comment period was January 30, 2008, rather than February 15, 2008, the actual deadline. (The CEQAnet printout for the project is attached as Exhibit 1.) The public and state agencies, therefore, were misinformed of the correct deadline for submission of written comments to the County. The DEIR compounds this error by not indicating the comment period deadline. In addition, the County has not does not include information regarding the close of the public comment period on its website. The County may have received additional comments from the public and agency representatives had they been properly informed of the comment period. The DEIR should be recirculated to the public

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and all required government agencies (including the Federal agencies listed above) as required by CEQA with accurate information on the deadline for public comment

B. The DEIR Fails to Comply with Government Code Section 7550.

The DEIR does not comply with section 7550 of the California Government Code. That section provides that any written report, such as the DEIR, prepared for or under the direction of a state or local agency, must contain the dollar amounts of all contracts relating to the preparation of the report if the total cost exceeds five thousand dollars. This section requires disclosure regardless of whether the non-agency employees prepared all or part of the report, as long as the total amount of work performed exceeds five thousand dollars. Section 7550 also requires that the contract and subcontract numbers and dollar amounts be contained in a separate section of the report. This information should have been included in the DEIR.

II. The Project Description Included in the DEIR is Deficient under CEQA.

An accurate, stable and finite project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity. (See San Joaquin Raptor Rescue Center v. County Of Merced (2007) 149 Cal. App. 4th 645, 655 ("Raptor"); McQueen v. Board of Directors of the Midpeninsula (1988) 202 Cal.App.3d 1136, 1143; County of Inyo v. City of Los Angeles ("County of Inyo") (1977) 71 Cal.App.3d 185, 193 (an accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR).)] The DEIR's description of the project omits critical information and fails to meet this standard and therefore must be revised and recirculated.

First, the DEIR's project description fails to disclose the status of the Harris Quarry's current operations. The DEIR states that "in 1990, the permit modification #UM 19-83/90 allowed for a one-time extraction and processing limit of 125,000 cubic yards of rock." (DEIR, p. 6.) It then goes on to state that "the permit otherwise provides for an annual 75,000 cubic yard extraction rate, which is the current annual production rate." (*Ibid.*) These two statements appear contradictory and must be explained to provide the public and decisionmakers with relevant information to assess the project. The Project Description must disclose the length of the prior and/or current permit, the daily and annual and total extraction limits under the permit, and its expiration date. Without this information, one could assume that the permit only allowed extraction and processing of 125,000 cubic yards of rock and once this amount was mined the permit expired. The EIR must also disclose whether the project is currently operating with or without a permit or in excess of permitted operations.

Keep the Code's prior inquiries indicate that the project is currently operating without a permit. (See correspondence attached as Exhibits 2 and 3.) Does the County acknowledge that the Harris Quarry is currently operating without a permit? Does the

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County acknowledge that operation of the Harris Quarry without a permit violates SMARA? If not, why? Has the County conferred with Department of Conservation regarding the status of the current Harris Quarry permit? Does the County intend to provide meaningful enforcement mechanisms if it approves a new permit and mining operation continue after the new permit expires? If yes, what enforcement measures are proposed? If not, why?

The amount of annual extraction amounts under the prior/current permit must be included in the DEIR to enable the public and agencies to adequately evaluate the project's baseline. Correspondence in the County's files indicates that the Quarry has exceeded its annual permitted extraction amounts under the prior/current permit. (See correspondence attached as Exhibit 4) What enforcement actions did the County take in relation to the noted permit violations? What enforcement mechanisms does the County intend to include for the current project to ensure such violations do not occur for the proposed project?

Second, the DEIR's project description fails to adequately inform the public and decisionmakers about the proposed project. The Project Description does not include information about proposed changes in the quarry operations. Instead, the DEIR appears to minimize the changes stating: "Truck volumes during normal operating periods will remain similar to the current quarry levels, this being 18 trucks per hour maximum and 5-6 per hour on a normal day." (DEIR, p. 14.) This statement conflicts with an earlier description of the project's truck trips:

Currently, the applicant operates three trucks (bottom dumps) per day hauling aggregate from the quarry to the wash facility.

(DEIR, p. 7.) Moreover, the reader is forced to search the appendix to the DEIR to find that quarry operations will occur for more days per year than they currently operate and will occur for more hours per day. According to the information contained in the appendix, "average daily production rates will increase from about 1,600 tons per day for 132 days per year up to about 1,800 tons over 250 days per year for nine hours per day." (Appendix F, Air Quality Data, EIR Air Quality Analysis.) What evidence supports the assumptions regarding average and maximum daily production rates? What years were used to compute the average and maximum daily production rates used as the baseline in the DEIR? Were the average and maximum daily production rates used as the baseline in the DEIR evaluated in the County's prior CEQA analysis of the Harris Quarry? Have the average and maximum daily production rates for the Harris Quarry ever undergone CEQA review by the County? What average and maximum daily rates were evaluated by the County in prior CEQA review? When were these rates evaluated? What mitigation measures imposed by the County in its prior CEQA review are part of the current project's baseline? What proposed mitigation measures are new? Does current/prior permit provide for daily maximum rates of extraction? Will the new permit provide daily maximum rates of extraction? How will any such maximum rates be enforced? Does the Ignacio Gonzalez February 14, 2007 Page 5 of 25

DEIR's project baseline include information from sites other than the project site (e.g. emissions and truck trips from the applicants wash facility and concrete plant)? If yes, what assumptions were made relating to the use of information from others sites to establish the baseline for the project and project site (e.g. water use; air quality modeling; length of truck trips, number of delivery trucks)? What evidence supports these assumptions?

The confusion does not stop here as it is unclear the length of the permit analyzed in the DEIR. The project description contained within the DEIR states the applicant requests an "End of Life" time frame for the project. (DEIR, p. 6.) The DEIR then goes on to state "the EIR recommends that the County consider a shorter, defined permit period and/or a permit review process." (DEIR, p. 36.) What time-frame is the EIR evaluating for the permit? How was the time-frame determined? Where is it disclosed?

The EIR appears to evaluate impacts based on a shorter undefined time frame. For example, the Mendocino County Water Agency stated that the EIR should evaluate blasting impacts on wells and springs. (DEIR, Appendix B, p.3.) The County responded that the "project does not increase blasting and would not alter impacts to wells and springs. Future phases of the project where blasting would occur at lower elevations might affect groundwater, but this EIR limits the length of the permit to 20 years, so the future potential impacts can be assessed *if the applicant seeks a future renewal of the permit.*" (*Ibid. (emphasis added*).) The EIR's discussion of the project, however, contradicts this point:

Over the life of the project, the applicant proposes to expand the quarry from about 11.5 acres to 46.3 acres (a proposed expansion of about 34.8 acres). The applicant estimates that the proposed mining area contains about 18,270,000 cubic yards (CY) and that it would take at least 90 years to remove this amount of material. As shown in Figures 1.5-1 through 1.5-3, quarry expansion would occur in three phases. In Phase 1, the, mining would expand to the north and west while maintaining the current elevation of the quarry floor (elevation 1,850 feet). Mining includes initial blasting of the rock. The quarry face would be benched with 12-foot wide benches (to allow vehicle access and slope stability); there would be 40-foot vertical cuts (typically cut at a slope of 0.75:1, or 0.75 horizontal extension for every 1 foot of vertical drop) between the benches. It is estimated that the area to be mined in Phase 1 contains about 12 million CY of material. Phase 2 will lower the quarry floor to elevation 1,750 feet. This would result in deepening the excavation on all sides of the quarry, including additional excavation along the south side of the site. Phase 2 has an estimated aggregate reserve of about 5 million CY. Phase 3 will lower the quarry floor to an elevation of 1,650 feet.

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(DEIR, p. 27.) The DEIR further states that the reclamation plan proposed for the project states that reclamation will not begin until "2046 at the earliest." (DEIR, p. 27.)

Another example is contained the project's discussion of hydrological impacts, which states:

The proposed lowering of the quarry floor to an elevation of 1,650 feet would bring the floor to the same channel bottom or thalweg elevation of Forsythe Creek 1,500 feet southwest of the quarry. The proposed quarry bottom would be below the elevation of the thalweg of the ephemeral tributary 1,000 feet to the immediate south of the quarry.

(DEIR, p. 142.)

The proposed mitigation for this impact, however, appears to modify the project description:

The mitigations ensure that the project would not adversely affect streamflow in Forsythe Creek. If the applicant in future decades seeks to mine to the elevation proposed in this application, additional technical studies would be required to assess subsurface flows beneath the tributary and whether mining below the elevation of the creek would capture any then existing subsurface flows.

(DEIR, p. 144.)

Nonetheless, the DEIR's alternative analysis is based on the 90-year permit. (DEIR, p. 354.) The constant back and forth creates confusion as to what, exactly, the EIR proposes as the project. The shifting project description also makes it impossible for public and decisionmakers to compare the potentially significant environmental effects of the project to the project alternatives. In addition, the DEIR provides insufficient information regarding the proposed asphalt plant stating: "it will be assumed that the new asphalt facility will meet AP-42 emission standards." (DEIR, p. 19.) While precise engineering drawings may not be required, the DEIR should include sufficient information regarding the proposed size of the facility, it maximum throughput, energy use, etc. in order to allow public comment on whether a smaller or more energy efficient design is feasible.

The DEIR's Project Description is also highly inconsistent with respect to quantities of materials excavated and processed at the site as explained in Richard Grassetti's February 2, 2007 letter. The Project Description does not adequately disclose the project's maximum permitted daily and annual production totals for each of the project's operations (e.g. aggregate, concrete, sand, asphalt, recycled materials, etc.). Are there maximum daily and annual permitted levels for each product produced by the project? Without this information it is impossible to properly evaluate the project's

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impacts on air quality, health risk, traffic, water supply, and hydrology, among other resources.

These errors are fatal to the adequacy of the DEIR. Under CEQA, the project refers to the underlying "activity" for which approval is being sought. (CEQA Guidelines, § 15378, subd. (c).) "The entirety of the project must be described, and not some smaller portion of it." (Raptor, supra, 149 Cal. App. 4th at p. 644, citing Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 829-831 [EIR for mining operation failed to include extension of water facilities, obscuring from view an important aspect of the project].) The primary harm caused by "the incessant shifts among different project descriptions" is that the inconsistency confuses the public and commenting agencies, thus vitiating the usefulness of the process "as a vehicle for intelligent public participation." (County of Inyo, supra, 71 Cal.App.3d at pp. 197-198.) "[O]nly through an accurate view of the project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives" (City of Santee v. County of San Diego (1989) 214 Cal.App.3d 1438, 1454.) The DEIR does not.

CEQA Guidelines section 15120 states that the DEIR shall contain all of the information required by sections 15122 through 15131 of the CEQA Guidelines. (CEQA Guidelines, § 15120, subd. (c).) If the information provided in the DEIR fails to comply with these requirements, then meaningful public review may be precluded to the extent that the DEIR lacks the basic and essential components of an adequate draft environmental document. (See CEQA Guidelines, § 15088.5, subd. (a)(4); Cadiz Land Co. v. Rail Cycle (2000) 83 Cal. App. 4th 74, 96; Save Our Peninsula Committee v. Monterey County Bd. of Supervisors (2001) 87 Cal. App. 4th 99, 134 ("Save Our Peninsula Committee").) As detailed herein, the DEIR does not meet these requirements and precludes meaningful public review. Under these circumstances, the defects cannot be cured without recirculating a revised DEIR for public review and comment prior to certification. (Ibid.).

III. <u>The Environmental Baseline Used For the DEIR Ignores and Understates the</u> <u>Significant Environmental Effects of the Project.</u>

As addressed above, major deficiencies exist in the project description and DEIR description of the current environmental setting. "Before the impacts of a project can be assessed and mitigation measures considered, an EIR must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined." (CEQA Guidelines, §§ 15125, 15126.2, subd. (a).) (*County of Amador v El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.) According to Guidelines section 15125, subdivision (a): "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time

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the notice of preparation is published..." (*Ibid*) As a result of the DEIR's inadequate project description, it is very difficult if not impossible to determine the project's baseline as addressed herein.

Significantly, the DEIR diminishes its potential daily impacts by analyzing shortterm emissions based on the estimated baseline peak daily production levels of the current operations processing facility. (DEIR, p. 226.) This unsupported baseline skews the project's air quality impacts and fails to account for the 118 days of significant air quality impacts where currently there is none. How does the DEIR evaluate and mitigate daily impacts that exceed the DEIR's impact thresholds on those days when the project does not currently operate?

The project similarly uses an inaccurate baseline for truck trips. As noted above "the applicant operates three trucks (bottom dumps) per day hauling aggregate from the quarry to the wash facility." The three truck trips are the appropriate baseline. They are the only truck trips that originate at the project site. Inexplicably, the DEIR states that "Truck volumes during normal operating periods will remain similar to the current quarry levels, this being 18 trucks per hour maximum and 5-6 per hour on a normal day." (DEIR, p. 14.) The use of this baseline is not supported by the evidence. Consequently, several of the DEIR's conclusions regarding potential impacts are understated.

As identified below, the DEIR fails to provide any baseline information for the certain impact section including but not limited to biological resources, water quality and hydrology. (See CEQA Guidelines, §§ 15151, 15152, 15144 (requiring lead agency to "use its best efforts to find out and disclose all that it reasonably can"); *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 873-874 ("*Friends of the Eel River*")(requiring consideration of historical levels of river diversions and noting that an EIR must demonstrate consideration of significant environmental impacts within the full environmental context and affording the fullest possible protection to the environment).) The DEIR's approach constitutes an abuse of discretion under CEQA by omitting relevant evidence and precluding informed decision-making and public participation. (*Raptor, supra*, 149 Cal. App. 4th at p. 659 ("An omission of baseline assumptions in an environmental impact report (EIR) falls short of the requirement of a good faith effort at full disclosure.")

While a lead agency has discretion to choose between conflicting expert opinions or differing methodologies in an effort to select an appropriate environmental baseline. The EIR, however, "must set forth any analysis of alternative methodologies early enough in the environmental review process to allow for public comment and response." (*Save Our Peninsula Committee, supra,* 87 Cal. App. 4th at p. 120.) As noted above the DEIR does not. Moreover, as in *Save Our Peninsula Committee*, the applicant has an economic incentive to try to establish a high baseline in order to maximize its permit levels. There is no evidence establishing baseline conditions in the DEIR. Purported evidence of the baseline must be supported by more that than "unsubstantiated opinion or Ignacio Gonzalez February 14, 2007 Page 9 of 25

narrative." (*Id.* at p. 122.) What efforts has the County made to verify the baseline assumptions contained in the DEIR?

Finally, as explained in a recent Court of Appeal decision on a mining project:

The decision makers and general public should not be forced to sift through obscure minutiae or appendices in order to ferret out the fundamental baseline assumptions that are being used for purposes of the environmental analysis. "An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Laurel Heights Improvement Assn. v. Regents of University of California, supra,* 47 Cal.3d at p. 405.) "*The data in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project.*" (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova,* supra, 40 Cal.4th at p. 442.)

This failure to clearly and conspicuously identify the baseline assumptions for purposes of describing the existing environmental setting further degraded the usefulness of the EIR and contributed to its inadequacy as an informational document. Accordingly, we hold that in any new EIR prepared in connection with this proposed Project, the baseline must not be obscured, but must be plainly identified in the EIR.

(*Raptor, supra*, 149 Cal. App. 4th at p. 659 (*emphasis added*.) The DEIR fails to meet this standard.

IV. <u>Consideration of the Proposed Project's Effects on Hydrology and Water Quality is</u> Inadequate. 8-74

The DEIR fails to accurately describe and consider the direct and indirect effects of the proposed project on water quality and water supply. Impact 3.2-A of the DEIR concludes, for example, that the proposed project will result in less-than-significant impacts, after mitigation, to water quality. (DEIR, pp. 4.4-11 to 4.4-12.) The DEIR, however, acknowledges that the project's proposed bioretention swale is undersized and states that a "swale design, maintenance and monitoring plan that meets site characteristics and design standards using low impact methodology has not been proposed and is required." (DEIR, p. 133.) The DEIR then states that the larger swale may be considered if there is enough available land but does not evaluate its feasibility. (DEIR, pp. 138-139.) Is the larger swale proposed as mitigation? If the project footprint is reduced would it change the feasibility of larger swale? Without this information it is

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impossible to determine whether the proposed mitigation is adequate and to evaluate the project's alternatives.

The problem is exacerbated because the DEIR does not include information 8-75 natural and current water quality information in its environmental setting and fails to include baseline information on water quality. For, example, anyone commenting on Hydrology and Water Quality section would not discover that Forsythe Creek is an impaired water body unless they read the Biological Impact section. (See DEIR, p. 160.) Moreover, instead of including baseline information on water quality, the DEIR proposes that the applicant collect the baseline information as mitigation for the project. (DEIR, p. 139.) After collecting the baseline information, the DEIR proposes as mitigation that the applicant follow the Regional Water Quality Control Board's (RWQCB) requirements for preparing a SWPPP for the project. (Ibid.) Setting aside the fact that this is impermissible deferred mitigation as addressed below, more importantly this is not adequate mitigation because the project may still significantly impact water quality even if a legally adequate SWPPP is proposed and approved. Again, without adequate baseline information, it is impossible to evaluate whether this is the case. The DEIR recognizes this possibility in Mitigation Measure 3.2-A.6, but proposes no substantive requirements. (DEIR, p. 140.) Instead, the DEIR states that additional mitigation may be required by the RWQCB in order to improve the quality of the stormwater leaving the site. (DEIR, p. 136.) This does not meet CEQA's requirements. (See Citizens for Quality Growth v. City of Mt. Shasta (1988)198 Cal. App. 3d 433, 442 ("Citizens for Quality Growth"), citing CEQA Guidelines, § 15020.)

The project also uses the wrong threshold criteria for determining the project's water quality impacts on fish and aquatic wildlife. For example, the DEIR states that "turbidity would not exceed baseline conditions by more than the Regional Board allowed 20%, so there should be no adverse impact on water quality as regards fish and aquatic wildlife inhabiting Forsythe Creek or the Russian River." (DEIR, p. 140.) However, the Regional Board's turbidity objectives in the Basin plan state that turbidity "shall not be increased more than 20 percent above *naturally occurring background levels.*" (NCRWQCB Basin Plan, p. 3-3.00 (*emphasis added*).) Moreover as explained by Peter R. Baye, Ph.D. in his letter dated February 7, 2008, the DEIR's evaluation of this impact does not specifically relate to steelhead or its habitat, and steelhead impact evaluations do not specifically relate to the range of hydrologic impacts. (Peter R. Baye, Ph.D. ("Baye") Letter, February 7, 2008.)

As mentioned above, the DEIR also fails to evaluate blasting impacts on water quality as recommended by the Mendocino County Water Agency. (DEIR, Appendix B, p.3.) There is no evidence in the DEIR to support the County's response that the "project does not increase blasting and would not alter impacts to wells and springs. Future phases of the project where blasting would occur at lower elevations *might affect groundwater*, *but this EIR limits the length of the permit to 20 years, so the future potential impacts can*

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be assessed if the applicant seeks a future renewal of the permit." (Ibid. (*emphasis added*).) As mentioned above, the DEIR's failure to evaluate these impacts is a failure to proceed in the manner required by law. Moreover, evidence exists in the DEIR that the contaminated groundwater would affect the creeks. The DEIR actually specifically states that on site water "would eventually be returned to the creek via groundwater flow." (DEIR, p. 142.)

The DEIR then attempts to mitigate its failure to mitigate its water quality impacts by suggesting the Board consider a shorter permit, so it can reevaluate the projects impacts in the future. (DEIR, p. 135.) As addressed above, the DEIR must evaluate the proposed project. The County cannot piecemeal its analysis of the proposed project's impacts by deferring portions of its analysis to future CEQA review. At minimum any such impacts should be disclosed as significant impacts in the project's cumulative impacts analysis.

The DEIR discussion on the projects impacts on area streams from the reduction of runoff and recharge is also inadequate. The DEIR states that because the "potential for capture of stream water exists and is not fully understood, this represents a potentially significant impact." (DEIR, p. 143.) As addressed above the project does not attempt to evaluate this impact. Instead, the DEIR purports to change the project description by including a mitigation measure that changes the proposed project's description. This impact is significant and unavailable based on the project description and analysis contained in the DEIR. Therefore, the DEIR must be recirculated with a modified project description or the impact must be changed to significant and unavoidable and mitigated to the extent feasible.

Finally, the DEIR analysis of the project's impacts on groundwater resources is inadequate The DEIR proposes future monitoring as mitigation but fails to provide adequate performance criteria. The DEIR admits the impact is potentially significant and unavoidable stating:

> Allowing for rainfall variation, if it is determined that the spring flow has had a statistically significant negative deviation from the baseline condition at any time during the expansion of the quarry, or within five years following the completion of the expansion and reclamation, the applicant shall be financially responsible for providing a reliable supply of water to the impacted beneficial water users who had an on-site well or spring in 2007. This could be done by providing a storage tank and delivered water to the affected homesite.

(DEIR, p. 149.) The proposed mitigation is wholly inadequate. A statement that applicant is "financially responsible for providing a reliable supply of water to the impacted beneficial water users who had an on-site well or spring in 2007" does not mitigate the environmental effects of the project on groundwater resources. An example

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of possible mitigation would be establishing groundwater recharge program. Moreover, an estimate of the volume of groundwater in the aquifer is critical to an informed determination of impacts to groundwater, including water supply and risk of contamination. (See *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal. App. 4th 74, 94 ["[T]he amount of groundwater at stake must be disclosed to the public and government agencies."] In addition, there is no rationale basis for excluding beneficial water users that establish on-site wells or springs effected by the project after 2007.

It should also be noted that this section is difficult for the public and decisionmakers to follow because the DEIR's significance thresholds are combined in the various impact analyses.

In sum, the DEIR's analysis of the project impacts on water quality and hydrology is incomplete and utterly inadequate. In fact, the DEIR acknowledges that it does not have sufficient information to evaluate many of the potential impacts. An EIR must consider a worst case analysis scenario of this potentially significant short-term effect resulting from project under CEQA. "CEQA places the burden of environmental investigation on government rather than the public," and an agency "should not be allowed to hide behind its own failure to gather relevant data." (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311 ("*Sundstrom v. County of Mendocino*").) The DEIR impermissibly fails to establish a proper baseline under CEQA from which to evaluate the proposed project's environmental effects; thus, skewing the entire analysis within the DEIR. (CEQA Guidelines, § 15063, subd. (d)(2), 15144.) Any conclusion by the County that substantial evidence supports a finding of less-than-significant impacts to the hydrology is therefore not supported by the evidence. (See *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729.)

V. Consideration of the Proposed Project's Effects on Biological Resources is Inadequate.

As detailed by Peter R. Baye, Ph.D. in his letter dated February 7, 2008 the DEIR's conclusions regarding the type, distribution, and abundance of wetlands and wetland habitats of sensitive species are not supported by substantial evidence. (Peter R. Baye, Ph.D. ("Baye") Letter, February 7, 2008.) The DEIR concludes that sensitive plant species and their wetland habitats are absent but the technical reports on which this conclusion is based "clearly report that wetland indicator plant species are reported from the site or biological assessment area." (*Ibid.*) This conclusion is further contradicted by the following statement in the DEIR: "The project includes filling of approximately 1,500 square feet of drainage that may qualify as wetlands under the Corps' jurisdiction." (DEIR, p. 34.) As explained See *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729: "the failure to provide clear and definite analysis of the location, extent and character of wetlands" possibly within project are

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identified and analyzed. (*Ibid.*) This problem is exacerbated by the fact that the County has not consulted with Army Corps as noted above.

In addition, the DEIR fails to assess potentially significant indirect and cumulative impacts to federally listed steelhead, and its designated Critical Habitat, in Forsythe Creek, due to reduction of stream baseflow or groundwater inputs to channel pool habitat, particularly during critical drought conditions. (Baye Letter, February 7, 2008.) This problem is exacerbated by the County's failure to consult with NMFS. Moreover, as Dr. Baye states the DEIR does not reflect, and is inconsistent with, the analysis of hydrology in Section 3.2 as it applies to steelhead habitat quality. (Baye Letter, February 7, 2008.) These inconsistencies make is impossible for the public and government agencies to evaluate and comment on project's water and biological resources impacts.

The DIER mitigation for loss of oak woodlands is also inadequate and potentially infeasible. As Dr. Baye concludes, even with proposed mitigation, the reclamation plan to replace existing mature oaks with irrigated transplants is not based on substantial evidence. (Baye Letter, February 7, 2008.) As Dr. Baye also points out the mitigation measure requirement that the applicant obtain a Timber Conversion Plan and Timber Harvest Plan permit does not substantively mitigate for biological impacts to forest plant communities. (Baye Letter, February 7, 2008.) Without this biologic evaluation of adverse impacts and substantive mitigation, there is no support for the County's conclusion that this impact is less than significant.

The CEQA Guidelines are clear that in "marginal cases where it is not clear whether there is substantial evidence that a project may have a significant effect on the environment, the lead agency shall be guided by the following principle: If there is disagreement among expert opinion supported by facts over the significance of an effect on the environment, the Lead Agency shall treat the effect as significant." (CEQA Guidelines, § 15064, subd. (g); *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1996) 29 Cal.App.4th 1597, 1607.)

VI. <u>Consideration of the Proposed Project's Effects on Traffic and Circulation is</u> <u>Inadequate.</u>

As addressed above, the project uses an inaccurate baseline for truck trips. The project's baseline assumptions are not supported by substantial evidence and inconsistent throughout the EIR as stated in Mr. Kruger's letter dated January 28, 2008. Again, this makes it impossible for the public to intelligently comment on the EIR. The Kruger comment letter provides further evidence of this problem as he explains in his letter how this affected his ability to comment on the project. (Kruger letter, January 28, 2008, p. 1.)

As further addressed by Mr. Kruger, the proposed acceleration lane is not long **8-85** enough, and does not come close to being adequate for the traffic and sight distance

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conditions at the quarry intersection. (Kruger letter, January 28, 2008, p. 3.) The proposed mitigation measures should be supported with appropriate design criteria from the Caltrans Highway Design Manual or by AASHTO in their latest "Green Book." (*Ibid.*) The DEIR must also address any impacts associated with any proposed changes to the acceleration lane (e.g. any additional impacts from construction). Mr. Kruger's comments regarding traffic safety must also be addressed.

The traffic and circulation section also fails to address the project's impacts on traffic on Highway 101 in Willits during peak hours. As the project will increase the number of truck trips on several such intersections which are at level of service "F" or unacceptable service levels within Willits, the project may have a significant impact on these intersections. This potentially significant impact must be evaluated and the DEIR should propose mitigation as required under CEQA, such as limiting the number of truck trips during peak hours.

Other comments have requested information such as information regarding the timing and number of deliveries, employee trips, etc. This information should also be included in the projects baseline for truck trips as it relates to this section as well as the project's impacts on air quality and energy use.

VII. The Conclusions in the DEIR Regarding Impacts to Air Quality Is Inadequate.

In addition to the baseline concerns regarding air quality addressed above, the DEIR's analysis of air quality impacts has many additional inadequacies. As addressed in Mr. Millers' February 4, 2008 letter, the DEIR's discussion of particulate matter pollution (DEIR, p. 212) does not adequately disclose the dangers of particulate matter from the project, especially diesel particulate matter. (Miller letter, February 4, 2008, p. 1.) The DEIR must be revised and recirculated to disclose that diesel particulate matter (from diesel engines, including trucks) has the potential to cause cancer and the project will result in a large increase of diesel trucks in the project area. (*Ibid.*) The failure to disclose this significant environmental impact and health risk is violates CEQA. (See *Berkeley Keep Jets over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal. App. 4th 1344, 1370 [Requiring further analysis because "[a]t the very least, the documents submitted by the public raised substantial questions about the project's effects on the environment and the unknown health risks to the area's residents."]

The DEIR must also revise its discussion of the MCAQMD Significance Criteria and reevaluate the project's air quality impacts as explained in the Miller letter. (Miller letter, p. 3.). As explain by Mr. Miller, Table 3.6-13 (DEIR, p. 239) demonstrates significant air quality impacts from the project emissions of CO, VOCs, PM10 and PM2.5. (Miller letter, February 4, 2008, p. 3.) These impacts were not disclosed to the public and this needs to be corrected in compliance with the CEQA. In fact, the Dryer

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Stack for the proposed asphalt alone exceeds the MCAQMD Significance Criteria for PM10, PM2.5, CO, and NOx. (See Table. 3.6-9, p. 235)

The DEIR's PM2.5 and threshold is not rationally related to its health effects or air quality standards. The Draft EIR states that the MCAQMD does not have significant thresholds for PM2.5, therefore, the thresholds for PM10 are used as surrogates. The DEIR fails to explain any rationale basis for use of this surrogate. In fact, the use of the surrogate is in fact meaningless because PM2.5 is a component of PM10 emissions. The more severe health risks and environmental effects associated with PM2.5 emission is precisely the reason that the separate standards were established. Given that the California and National Ambient Air Quality Standards are significantly lower for PM2.5 as a result of these consequences, the threshold lacks any possible justification. The County must provide a rationale basis for establishing the PM2.5 threshold. The County use of California Ambient Air Quality Standards (CAAQS) for CO emissions also fails to provide any rationale analysis.

Finally, the DEIR fails to address air quality impacts from construction of the plant facilities, berms, and roads in its impact analysis. The DEIR must analysis the whole of the project as addressed above. These construction impacts of the project should also be addressed in other areas of the project, including but not limited to any impacts to water quality and circulation.

VIII. The DEIR's Treatment of Cumulative Impacts Is Cursory at Best.

The cumulative impacts analysis contained within the DEIR is throughout the DEIR does not include the level of detail required by CEQA. The DEIR has not evaluated the cumulative impacts of "related past, present, and reasonably foreseeable probable future projects" compound or increase the project's environmental impacts. (CEQA Guidelines, § 15355, subd. (a).) Instead, the project has narrowly focused its analysis on possible future projects. (See DEIR, p. 42.)

The project's cumulative impacts discussion of Global Warming impacts is particularly problematic in light of the fact the DEIR estimates as much as 5,150 tons of Green House Gas (GHG) emissions will be emitted by the project. The DEIR further acknowledges that this impact is potentially significant. Nonetheless, the DEIR makes no effort to evaluate this adverse impact. It is likely this figure should be revised to include additional GHG emissions due to the inadequacies of the baseline assumptions.

While the County should be commended for addressing the climate change issue in the DEIR, because of the failure to properly evaluate and mitigate global warming impacts, the County should not approve this Project, because the County's analysis violates CEQA. The County has failed to address the significance of the Project's contribution to cumulative global warming impacts, particularly in light of the applicant's request for a "life of quarry" (90 year) permit, and therefore does not require any specific Ignacio Gonzalez February 14, 2007 Page 16 of 25

mitigation measures to address those impacts. Because any increase in emissions will make it more difficult for the State to achieve the greenhouse gas reductions required by Assembly Bill 32, and this Project standing alone will produce a large, quantifiable increase in annual greenhouse gas emissions, the DEIR must evaluate global warming impacts and *discuss* feasible alternatives and mitigation measures to avoid or reduce those impacts.

The Intergovernmental Panel on Climate Change of the United Nations recently published its finding that overwhelming evidence establishes that global warming is occurring and is caused by human activity. (Climate Change 2007: The Physical Science Basis, Summary For Policymakers, Fourth Assessment Report of the IPCC, February 2007.) With respect to impacts in the state, the California Climate Change Center reports that temperatures are expected to rise 4.7 to 10.5F by the end of the century. (Amy Lynd Luers, Daniel R. Cayanet et al., Our Changing Climate: Assessing the Risks to California (July 2006) at p. 2.) These increases would have serious consequences, including substantial loss of snow-pack, an increase of as much as 55% in the risk of large wildfires, and reductions in the quality and quantity of agricultural products. (*Ibid.*) Additionally, the report predicts increased stress on the State's vital resources and natural landscapes. (*Ibid.*)

Assembly Bill 32, the California Global Warming Solutions Act of 2006, codified at Health and Safety Code Section 38500, et seq. ("AB 32") demonstrates that the Legislature recognizes the serious threats that global warming poses to California. To combat these threats, AB 32 requires reduction of the State's GHG emissions to 1990 levels by 2020. (Health & Safety Code § 38550.) This emissions cap is equal to a 25% reduction from current levels. (See 9/27/2006 Press Release from the Office of the Governor, available at <u>http://gov.ca.gov/index.php?/print-version/press-release/4111</u>.)

CEQA and its implementing Guidelines provide that in any of the following situations, a finding must be made that the project may have a significant effect on the environment:

(1) A proposed project has the potential to degrade the quality of the environment, curtail the range of the environment, or to achieve short-term, to the disadvantage of long-term, environmental goals.

(2) The possible effects of a project are individually limited but cumulatively considerable. As used in this paragraph,"cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

(3) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly

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(Public Resources Code § 21083(b); see also CEQA Guidelines, § 15065.)

As part of the analysis carried out in an EIR, the agency must formulate mitigation measures and examine alternatives to the proposed project. CEQA mandates that public agencies refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects. (Pub. Resources Code § 21081; see also *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 CalApp.4th 105, 134.) As the Court of Appeal concluded in *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 720 [internal quotation omitted]):

[O]ne of the most important environmental lessons evident from past experience is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant, assuming threatening dimensions only when considered in light of the other sources with which they interact. Perhaps the best example is air pollution, where thousands of relatively small sources of pollution cause a serious environmental health problem. CEQA has responded to this problem of incremental environmental degradation by requiring analysis of cumulative impacts.

(Ibid)

Quantifying the GHG emissions resulting from the Project, the DEIR estimates that operation of the Project will produce 5,150 tons per year. (DEIR, p. 263.) It is unclear how the project reaches this estimate when the project <u>annual</u> CO2 emissions alone are estimated at 6,422 tons. It does not take into account GHGs other than carbon dioxide, such as nitrous oxides. Moreover, the mitigation measures are insufficient and in many cases unenforceable or meaningless. For example, requiring the applicant when replacing diesel mobile equipment to purchase new equipment meeting CARB emissions requirements is meaningless. In fact, this is not mitigation at all. Instead the DEIR should require the applicant to replace existing equipment that does not meet these current standards.

The proposed mitigation to "encourage solar panels," is illusory and unenforceable. The DEIR should require mitigation that requires the applicant actually use solar electric panels, solar hot water collectors, and/or other sustainable and renewable energy sources that meet project energy requirements and substantially reduce GHG emissions to help meet State requirements. In the alternative, the applicant should be required to purchase its electric power from renewable energy sources.

The purposed mitigation to "if available, use clean alternative fuels," is again illusory and unenforceable. The applicant should be required to use generators only if the electric power grid fails, and only using best available technology and fuels that produce the least CHG emissions. Similar requirements could be required for other equipment. Ignacio Gonzalez February 14, 2007 Page 18 of 25

The DEIR fails to provide any analysis of how the proposed mitigation would reduce the project's potentially significant impacts to a less than significant level. (See DEIR, p. 264.) The DEIR conclusively determines the proposed project's contribution to cumulative GHGs would be less than significant stating that it would be considered consistent with AB 32. Given AB 32's requirement 25% reduction from GHG current levels, substantial evidence does not support this conclusion. The DEIR must determine whether the proposed project would be significant after the proposed mitigation is implemented and that determination must be supported by substantial evidence. (See CEQA Guidelines, §§ 15064, subd. (i)(1) ("the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable"), 15065, subd. (c) (mandatory finding for "cumulatively considerable" incremental effect); Communities for a Better Environment v. California Resources Agency (2002) 103 Cal.App.4th 98, 120 ("the lead agency shall consider whether the cumulative impact is significant and whether the proposed project's incremental effects are cumulatively considerable").) If the containment levels are unknown over time, the DEIR lacks substantial evidence supporting its conclusion that cumulative impacts to air quality are less than significant. (See also CEQA Guidelines, § 15130, subd. (b).).

It should be noted that the mitigation proposed above would also potentially reduced the projects significant air quality impacts. Again, the lack of information regarding the proposed "modern state-of-the-art facility" makes it impossible to evaluate whether more energy efficient design is feasible or additional mitigation is feasible.

Finally, to the extent the DEIR purports to limit the project length or modify the project description to address the inadequacies contained in the DEIR, the cumulative impact section must address those aspects of the project that have been proposed by the applicant and not adequately addressed in other sections of the DEIR.

IX. <u>Consideration of the Proposed Project's Effects on Plan Consistency and Land Use is</u> <u>Inadequate.</u>

Granting a variance to the project or adoption of the proposed new Mineral **8-90** Processing Combining District would conflict with the County's General Plan. As stated in the DEIR, the proposed new zoning district would conflict with Land Use Element, Agriculture Policy 1h:

Policy 1h. New nonagricultural classifications shall not be assigned to prime agricultural lands or prime rangelands (as defined by County ordinances) unless all of the following findings, supported by substantial evidence in the record, can be made by the decisionmaking body:

i. The subject parcel or parcels have already been rendered substantially unusable for agricultural purposes by virtue of

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> encroaching adjacent nonagricultural uses. Nonagricultural uses of the subject parcel shall only be allowed as an extension of adjacent non-agricultural uses.

ii. Use of the site will not impair agricultural activities in the project area.

iii. There is no land which is zoned commercial, residential or industrial where the project can be reasonably located.

iv. The site location is in conformance with all applicable elements of the County General Plan, and the decision is in the public interest.

Inconsistent. The processing site contains soils that appear to meet the criteria for being considered "prime rangeland." **Per this policy, nonagricultural classifications cannot be assigned unless the four conditions can be met, and they cannot since** the site has not been rendered unusable for grazing plus there might be other sites designated industrial where the facilities could be located.

Similar inconsistencies could occur at other sites if the new combining district is adopted.

(DEIR, pp. 309-310 (emphasis added).)

The DEIR further indicates that the project may conflict with the follow General Plant policies: Forestry Policy 1d, Mineral Resources Policy 2d, and Open Space and Conservation Element Policy 7. Moreover, there is little or no evidence supporting most of the conclusions reached in this section. For example, the DEIR determines that the proposed project is consistent with Range Lands general plan designation for this site without any explanation or evidence. (DEIR, p. 312.)

As addressed previously, many of the DEIR's impact conclusions are understated or not supported by substantial evidence. In some cases the possible impact are just completely ignored Many of the problems identified in this letter and by other commenters demonstrate that the conclusions reached in this section are not supported by substantial evidence including but not limited to the projects impacts on air quality, energy, fisheries, forestry, natural areas, vegetation and wildlife.

Government Code section 65860, subdivision (a) prohibits enactment of a zoning ordinance inconsistent with a County's general plan. (Gov. Code, § 65860, subd. (a); see also *City of Irvine v. Irvine Citizens Against Overdevelopment* (1994) 25 Cal. App. 4th 868, 876.) Section 65860 further states that a zoning ordinance shall be consistent with a city or county general plan only if the various land uses authorized by the ordinance are compatible with the *objectives, policies, general land uses, and programs specified in the plan.* (Gov. Code, § 65860, subd. (a)(2).) While perhaps the County chose not analysis

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its General Plan objectives, general land uses, and programs because it realized the project was inconsistent with the General Plan, we still feel the need to note that the DEIR's analysis is incomplete.

Finally, as the County is also undoubtedly aware variances must also be consistent with the General Plan. (*Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184 ("[There] is no agency discretion to promulgate a regulation which is inconsistent with the governing statute.")

The DEIR does not appear to indicate that the applicant has requested a General Plan amendment. Without such an amendment, we fail to see how the County can approve the project. Please direct us to any authority that allows the County to approve a project inconsistent with the General Plan. Alternatively, please identify any entitlements sought by the applicant requesting a General Plan amendment. We request that the County provide us with a copy any such applications pursuant the California Public Records Act.

X. <u>The DEIR Omits Any Discussion of the Energy Impacts Resulting from the Proposed</u> <u>Project.</u>

The DEIR admits that the proposed project will use "extensive amounts of 8-91 electricity, diesel fuel, and gasoline," yet the DEIR inexplicably omits any discussion regarding the project's energy efficiency. (DEIR, p. 305.) In order to assure that energy implications are considered in project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. (CEQA Guidelines, Appendix F.) The DEIR must describe feasible measures which could minimize significant adverse impacts, including inefficient and unnecessary consumption of energy. (CEQA Guidelines, § 15126.4, subd. (a)(1); see also id. at subd. (a)(1)(C) ("[e]nergy conservation measures, as well as other appropriate mitigation measures, shall be discussed when relevant"); CEQA Guidelines, Appendix F (Energy Conservation). The DEIR cursorily addresses this issue by stating the given high energy costs it is anticipated would use energy efficient equipment. The only energy use quantified by DEIR is for the diesel generator which the applicant estimates will use up to 3,200 gallons of diesel per day. The DEIR does not discuss possible uses of alternative energy resources or analyze whether alternative sites for the project would allow for uses of such alternative energy resources. This is not adequate under CEQA. The proposed mitigation in this comment letter relating to GHG emissions is applicable here also.

Appendix F provides that "[a]lternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy." (CEQA Guidelines, Appendix F, subd. (II)(E).) The DEIR is devoid of this information. The County should prepare a revised DEIR that includes this Ignacio Gonzalez February 14, 2007 Page 21 of 25

information and compares the energy impacts of the proposed project with the alternatives and proposes feasible mitigation; thus avoiding a wasteful and unnecessary consumption of energy. What analysis has been done to consider how the project could reduce its diesel consumption?

For example if the project reduces its diesel consumption (e.g. by eliminating the diesel generator, improving energy efficiency for the equipment used at the site, replacing older haul trucks, and/or using alternative energy sources to power portions of the project) it would also reduce fuel delivery trucks trips. This would mitigate the projects impacts on air quality and circulation also. Has the County conducted any analysis to determine whether the project could reduce energy use. If yes, when was the analysis performed and what were the results? If not, why?

XI. The Proposed Mitigation Measures are Inadequate under CEQA.

The County should have included the Mitigation Monitoring and Reporting Program as part of the DEIR (rather than the Final EIR as the County proposes), to afford the public and responsible agencies with an opportunity to comment on the adequacy of the mitigation measures. (CEQA Guidelines, § 15074, subd. (d), 15097, subd. (a); Pub. Resources Code, § 21081.6.) Instead, the County chooses to release the Program as part of the Final EIR when additional time for public comment is generally not provided. (DEIR, p. 1-5.)

The DEIR's attempt to rely on mitigation measures that "may be" included in future permits issued by the USACOE, CDF, RWQCB and the MCAQMD as a basis for concluding that the project's impacts will be reduced to a less than significant level is not permitted by CEQA. (Sundstrom v. County of Mendocino, supra, 202 Cal.App.3d 296; Quail Botanical Gardens Foundation, Inc. v. City of Encinitas (1994) 29 Cal.App.4th 1597, 1604; Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359.) The formulation of mitigation measures cannot be deferred. (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).)

In addition to the problems with the mitigation measure identified above, the DEIR includes other inadequate mitigation measures are proposed in the DEIR including:

(1) 3.6-B.1 - The applicant shall not emit criteria pollutants beyond the levels described and analyzed in this EIR. The Mendocino County Air Quality Management District (MCAQMD) shall not issue an Authority to Construct and a Permit to Operate if the equipment installed would cause the emission of pollutants that exceed the levels analyzed herein. If the MCAQMD determines that the final list of equipment and/or the proposed hours of operation per day and per year of any of the equipment would exceed the levels assessed in this EIR, then additional CEQA analysis would be required to assess the air quality and health impacts of that final list of equipment and operating hours prior to considering whether to issue the Authority to Construct and a Permit to

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Operate. MCAQMD will review the final list of equipment and the analysis in this EIR and add any additional equipment or operation mitigations that the District finds are needed to avoid air quality standard exceedances and conform with all District, State, and Federal air quality standards and requirements.

In short, the DEIR violates a fundamental principle of CEQA by improperly basing the DEIR on the presumed success of mitigation measures that have yet to be formulated. Each "public agency is required to comply with CEQA and meet its responsibilities, including evaluating mitigation measures and project alternatives." (*Citizens for Quality Growth v. City of Mt. Shasta, supra*, 198 Cal. App. 3d at p. 442, citing CEQA Guidelines, § 15020.) Therefore, the DEIR cannot defer the formulation of mitigation measures to another state or federal agency to ensure that contamination does not occur.

The DEIR's mitigation measures are reminiscent of the facts in *Sundstrom v*. *County of Mendocino, supra*, 202 Cal.App.3d at p. 307. In that case, the Court of Appeal faulted the respondent county for assuming that various other agencies would be able to devise a means of avoiding potentially significant impacts associated with soil stability, erosion and flooding because there was no certainty that success could be achieved. The agency, therefore, was found to have no basis for finding that the project's impact would be insignificant. (*Id* at pp. 306-314.)

As explained in Federation of Hillside and Canyon Associations v. City of Los Angeles (2d Dist. 2000) 83 Cal. App. 4th 1252 mitigation measures must be "incorporated into the project or required as a condition of project approval in a manner that [would] ensure their implementation." (Id. at p. 1262 (italics added).) Thus DEIR violates CEQA because is written in a manner that makes it impossible to ensure their implementation. (See *ibid.*; see also Pub. Resources Code, § 21081, subd. (a)(1); CEQA Guidelines, § 15091, subd. (a)(1)).

As such, the following additional mitigation measures should be included in the Final EIR and adopted as conditions of approval to avoid or significantly reduce the otherwise significant water quality impacts: This same deficiency is found in all of the project's proposed air quality mitigation.

(2) <u>3.2-D.2</u> - Reduce project water consumption to the degree feasible by implementing 'best management practices' such as use of concrete admixtures and utilizing wastewater and detention pond water recycling to reduce the amount of water required. Some admixtures can reduce water content used in concrete by 30%. Recycling of aggregate wash water and use of water stored in sedimentation ponds can be used to reduce groundwater use, provided the water meets ASTM requirement (DEIR, p. 149.)

Requiring the general implementation of BMPs is not an adequate performance standard under CEQA. Even if specific mitigation measures were not identifiable or

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feasible for the proposed project (and they are), the EIR must specify realistic performance standards that would mitigate the significant effect of the project. (See *Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011,1028 ("agency can commit itself to eventually devising measures that will satisfy specific performance criteria articulated at the time of project approval").)

CEQA also requires that a mitigation monitoring and reporting program be prepared and adopted prior to the County adopting findings for the project. Waiting until construction begins is not adequate under CEQA. (Pub. Resources Code, § 21081.6.)

(3) <u>3.3-D.1</u> Prior to conducting any work within the stream channel, the applicant shall apply to the U.S. Army Corps of Engineers for a wetland delineation and permit coverage for filling in the 290-foot long drainage. The applicant shall abide by any conditions required by the Army Corps.

<u>3.3-D.2</u> Prior to conducting any work within the stream channel, the applicant shall obtain a Streambed Alteration Agreement from the California Department of Fish and Game (DFG) and Water Quality Certification from the Regional Water Quality Control Board for filling in the drainage, and abide by all conditions set forth in that agreement.

Again, the DEIR cannot defer the formulation of mitigation measures to another state or federal agency to ensure that the project's impacts on timberland, water quality, air quality, wetlands or watercourses are less than significant.

XII. The DEIR Fails to Consider A Reasonable Range Of Alternatives.

The revised DEIR must "describe a range of reasonable alternatives to the project, **8-93** or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of alternatives." (CEQA Guidelines, § 15126.6; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566.) The alternatives must be described in sufficient detail to serve the informational purpose of the report to the governmental body which will act and the public which will respond to the action through the political process. (*City of Rancho Palos Verdes v. City Council* (1976) 59 Cal.App.3d 869, 892.) As explained above, the DEIR's shifting project description makes it impossible to evaluate the proposed alternatives.

The DEIR also violates CEQA by failing to include several suggested alternatives proposed by comments. (DEIR, p. 349.) The DEIR incorrectly dismisses these comments stating: CEQA does not require that the alternatives analysis assess separate locations for various components of a proposed project. (*Ibid.*) Please provide any authority for this statement.

CEQA precludes the County from approving the project as proposed because there are feasible alternatives that would substantially lessen the significant environmental

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effects of the project. (Pub. Resources Code, § 21002.) CEQA does not distinguish between alternatives at single or separate locations. As explained by the Supreme Court in *Laurel Heights v. Regents of the University of California* (1988) 47 Cal.3d 376, 404-406, an EIR is required to explain in detail why various alternatives were deemed infeasible, and should explore the potential to locate the project somewhere other than proposed.

What efforts were made to locate an alternative site for the project other than contacting the owner of the Blue Ridge Rock Quarry and contacting a realtor about available MLS listing for industrial sites? What efforts were made to locate other possible quarry sites within the County? Who was consulted and when was the search conducted? What information was used to determine potential other quarry sites, or industrial plants sites, particularly those sites that are currently zoned industrial?

Alterative 8 should consider the placement of smaller asphalt and cement plants (possibly temporary facilities) in both Ukiah and Willits as this would address the DEIR's concerns that placement of the entire project at any location other than the proposed site would increase truck trips. This alternative would also likely reduce the projects significant impacts, including but not limited to air quality impacts and energy use.

CEQA requires the County, moreover, to prepare a revised DEIR that meaningfully considers the suggested alternatives in detail. (*Friends of the Eel River, supra*, 108 Cal.App.4th at p. 873 (holding that because the discussion of alternatives omitted relevant, crucial information, it subverted the purposes of CEQA and was legally inadequate).) A proper discussion of alternatives should provide sufficient "information to the public to enable it to understand, evaluate, and respond" to the agency's conclusion. Stated differently, the discussion should "contain facts and analysis, not just the agency's bare conclusions or opinions," and should include "meaningful detail." (*Id.* at pp. 404-406.) As explained in *Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal. App. 3d 1167, 1180–1183 (*Goleta I*) assertions that a particular alternative is economically infeasible simply because it would be more expensive or less profitable to the private applicant are not adequate. "In the absence of comparative data and analysis, no meaningful conclusions regarding the feasibility of the alternative could have been reached." (*Id.* at pp. 1180–1181.) The Court of Appeal added that:

The fact that an alternative may be more expensive or less profitable is not sufficient to show that the alternative is financially infeasible. What is required is evidence that the additional costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project.

(*Ibid.*) Because the DEIR fails to provide substantial evidence supporting a finding of infeasibility for any suggested alternatives and rejects out of hand the possibility of locating the concrete and asphalt plants at separate locations, additional analysis is

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required before the Board may approve the project. (Pub. Resources Code, § 21002; Sierra Club v. Gilroy City Council (1990) 220 Cal.App.3d 30, 31.)

XIII. Conclusion

We urge the County to weigh seriously the concerns voiced by the Keep the Code. The Board of Supervisors should view the DEIR for what it is - the beginnings of a baseline for the project applicant. The Board should direct staff to prepare a revised DEIR to address the deficiencies identified herein and by other commenters. Thank you for the opportunity to comment on the DEIR and for your consideration of the above matters. If the County decides to approve the project and certify the EIR, please send me a copy of the Notice of Determination ("NOD") immediately upon filing. (Pub. Resources Code, §§ 21152; 21167, subd. (f).)

Very truly yours,

Howard F. Wilkins IIII

Encls.

cc: Gary E. Kruger, P.E., Paul Miller Peter R. Baye, Ph.D. Keep the Code

Response to Letter from Howard Wilkins III (Remy Thomas Moose & Manly LLP)

- 8-1. The introductory comments state how the commenter's clients are opposed to the project, that the County should not approve the project, and that the EIR inadequately discloses significant environmental effects. As specific comments to support the commenter's claims are presented after these introductory comments, response to the general claims will not be made except to state that the commenter is incorrect that the RDEIR is inadequate. The RDEIR meets all CEQA requirements to objectively describe the possible significant impacts of the proposed project, identify feasible mitigation measures when warranted, and compare the project to alternatives that would reduce the significant impacts. The RDEIR addresses the concerns that this commenter expressed about the original project and the original DEIR as the analyses in the RDEIR included recommendations made by the commenter and answered uncertainties the commenter noted in his original letter. Detailed responses to specific claims and questions are presented below in response to the commenter's specific comments.
- 8-2. Upon the request of the project applicant (see Comment 14-1 later in this FEIR), the County extended the public review period for an additional 45 days and made available all documents cited in the RDEIR either as hard copies (at the offices of the Department of Planning and Building Services) or as a list of electronic links to certain documents (i.e., websites where they are readily accessible to the public at any time). This extension of the public review period and providing the documents or electronic addresses where all cited documents could be found address the claimed inadequate noticing included in this comment.

While no additional response is required, we believe that the comment was incorrect and that this extension of the review period plus the compilation of documents and electronic links is not required by CEQA. We believe that this comment is a misinterpretation of the intent of CEQA. The comment refers to one sentence in the Public Resources Code stating that the County needs to provide the address where all documents "referenced" in the draft environmental impact report are available for review. It then cites CEQA Guidelines Section 15087(c)(5) that states that the County will provide the address where all documents referenced in the EIR will be available for public review and readily accessible during the lead agency's normal working hours. However, the commenter ignores the subsequent sections in the CEQA Guidelines that specifically address what documents are considered "referenced" and need to be made available for public review.

CEQA Guidelines Section 15148 titled "Citation" states:

Preparation of EIRs is dependent upon information from many sources, including engineering project reports and many scientific documents relating to environmental features. These documents should be cited but not included in the EIR. The EIR shall cite all documents used in its preparation including, where possible, the page and section number of any technical reports, which were used as the basis for any statements in the EIR. The Guidelines then go on to describe documents that are incorporated by reference. Section 15150 (Incorporation by Reference) states:

- (a) An EIR or Negative Declaration may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public. Where all or part of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of the EIR or Negative Declaration.
- (b) Where part of another document is incorporated by reference, such other document shall be made available to the public for inspection at a public place or public building. The EIR or Negative Declaration shall state where the incorporated documents will be available for inspection. At a minimum, the incorporated document shall be made available to the public in an office of the Lead Agency in the county where the project would be carried out or in one or more public buildings such as county offices or public libraries if the Lead Agency does not have an office in the county.
- (c) Where an EIR or Negative Declaration uses incorporation by reference, the incorporated part of the referenced document shall be briefly summarized where possible or briefly described if the data or information cannot be summarized. The relationship between the incorporated part of the referenced document and the EIR shall be described.

These two sections are where the CEQA Guidelines provide specific guidance about what documents need to be made available for public review and what documents do not. It does not state that documents that are cited as footnotes or, particularly, all documents listed in the EIR's Bibliography need to be made available for public review. EIR preparers have historically not been required to make all cited documents available to the Lead Agency. This point is further clarified in the Continuing Education of the Bar's (CEB's) handbook, *Practice Under the California Environmental Quality Act* (Stephen L. Kostka and Michael H. Zischke, Second Edition, January 2011 Update). Under Section 9.18 of that handbook, it states:

The requirement that the EIR public review notice indicate the address where copies of the EIR and all "referenced" documents are available has also led to some confusion. This notice requirement should be read together with 14 Cal Code Regs §15150(b), which requires that documents incorporated by reference in an EIR be made available for inspection. See also 14 Cal Code Regs §15087(c)(5). The requirement should not be interpreted to apply to documents that are cited in an EIR under 14 Cal Code Regs §15148, because there is no requirement that such documents be made available for public inspection. See El Morro Community Ass'n v. California Dep't of Parks & Recreation (2004) 112 CA4th 1341, 1354 n5, 19 CR3d 445.

Given that the CEQA Guidelines explicitly state the requirements for "cited" and "referenced" documents, if the commenter were correct, then the code and

guidelines would be internally inconsistent. We believe that they are consistent as does the *Practice Under the California Environmental Quality Act*.

In conclusion, we believe the commenter is incorrect. Nevertheless, the documents or document electronic addresses have been available during the 45-day public review extension,

Finally, we would note that during this additional 45-day review period, 11 additional comment letters were received - none were from public agencies nor technical experts representing the commenter's client or other technical experts.

- 8-3. The commenter is incorrect in stating that the cited Code and Guidelines Sections require the EIR to provide a list of agencies consulted with. Rather the cited Sections state that the Lead Agency will consult with Responsible, Trustee, and other agencies and individuals. Contrary to what the commenter states, the Sections do not require that the EIR contain the list of contacted agencies and individuals. That said, the Notice of Preparation that included the notification of where and when the EIR scoping meeting would be held was sent to the State Clearinghouse who has the responsibility of forwarding the NOP to pertinent State agencies. The County also sent the NOP and an invitation to attend the public agency scoping meeting held August 17, 2010 to 39 agencies, including the U.S. Fish and Wildlife Service, NOAA-Fisheries, Army Corps of Engineers, Bureau of Land Management, California Department of Fish and Game (CDFG), the RWQCB, and California Department of Conservation. The only State agency to attend that scoping meeting was the Department of Fish and Game (CDFG). All these agencies were previously requested to comment on the original DEIR, so they were all well aware of this project. Previously, the EIR preparers and County staff met with CDFG staff during the public review period for the original DEIR to develop more distinct mitigation measures to offset impacts to wetlands and oak woodlands. The applicant's engineer subsequently worked with CDFG staff to develop the off-site wetland mitigations. We would note that neither CDFG, U.S. Fish and Wildlife Service, NOAA-Fisheries, or Army Corps of Engineers submitted a comment letter on the RDEIR.
- 8-4. The RDEIR was circulated to the United States Fish and Wildlife Service (USFWS), the Army Corps of Engineers (ACOE), and the National Marine Fisheries Service (NMFS) and was not returned with comments from any of these agencies. Referral of the project to the Environmental Protection Agency (EPA), as overseer of any ACOE analysis regarding the filling of wetlands and/or point source discharges to waterways, was considered by the County to be redundant. A copy of the RDEIR was otherwise sent to the remaining federal agencies on May 20, 2011.
- 8-5. The public review period was extended at the request of the applicant during the July 21, 2011 meeting of the County Planning Commission. See Comment 14-1. The comment period was thereby extended from July 21 to September 6, 2011 at that time and noticed accordingly.

8-6. The actual full paragraph in the project description passage referenced in this comment reads as follows:

Current Use Permit #UR 19-83/95 applies to the existing quarry, which has been in use since the mid-1920s. In 1990, the permit modification #UM 19-83/90 allowed for a one-time extraction increase and a one-time increased processing limit of 125,000 cubic yards of rock, but this modification expired in 1995. The permit provides for an annual 75,000 in situ (i.e., the volume of rock as measured in place in the quarry wall or floor) cubic yard extraction rate, which is the current annual production rate.

The passage is accurate in stating that the modification approved in 1990 allowed for the one time extraction increase, otherwise the permit at that time allowed for 50,000 cy to be extracted on an annual basis. As stated, that permit expired in 1995, at which time a use permit and reclamation plan renewal (#UR 19-83/95) was processed and approved on January 16, 1997, allowing for up to 75,000 cy to be taken per year. That particular permit expired on January 26, 2007. However, the Quarry continues to have permission to operate under that same permit while the subject project application is being processed. County policy has and continues to allow uses subject to renewal as long as applicants demonstrate good faith efforts in going through the renewal process. In this case, the renewal was applied for in 2005, well in advance of the expiration date for #UR 19-83/95.

Regarding the second portion of the comment, the project description is technically incorrect in stating that an extraction rate of 75,000 *in situ* cubic yards is allowed per the current entitlement under which the quarry continues to operate. The actual language of the permit limits production to 75,000 cubic yards without specifying whether that meant 75,000 cy *in situ* or after initial processing. The applicant has historically mined the site as if the permit condition meant 75,000 cy in situ. As described on page 97 of the RDEIR, this production rate was used as the baseline for assessing project impacts. This issue has been clarified in revised RDEIR text shown in Chapter 3.

- 8-7. Much of this comment has been addressed in the previous response. Daily extraction records are not kept nor have they ever been required of the applicant for past entitlements. Instead, annual reporting has been an ongoing condition of the permit. Annual allowed extraction volumes since the January 2007 expiration have remained at 75,000 cy. The operator was assessed an administrative penalty for over-extraction that occurred in 2007 and 2008. Otherwise, overall annual extraction averages have remained within the allowable limits.
- 8-8. The operation has been allowed to continue under the conditions imposed by the expired permit. This is consistent with County policy which allows uses subject to renewal to continue as long as applicants have demonstrated good faith efforts in obtaining the necessary entitlements.
- 8-9. The County has kept the Department of Conservation Office of Mine Reclamation (OMR) informed of the permitting status throughout the process. Annual

inspection reports are submitted to OMR including updates on the operation's renewal status and overall SMARA compliance.

- 8-10. See Responses 8-8 and 8-9 regarding these same questions. The Mitigation Monitoring and Reporting Program identifies responsibility for mitigation monitoring. The County will follow ongoing procedures for enforcement of Use Permit Conditions. The questions asked in Comments 8-7 to 8-10 refer to historical issues or have to do with County recording and enforcement processes. These issues do not address or affect the environmental setting for the RDEIR. The RDEIR addresses the physical impacts on the environment resulting from a proposed project compared to a baseline quarry operation that extracts and processes 75,000 cy *in situ* of rock per year.
- 8-11. Annual extraction figures are considered proprietary information and are not made available for public review. That said, the applicant has voluntarily provided extraction rates see Comment 14-2. The operator was assessed an administrative penalty for overextraction that occurred in 2007 and 2008. Otherwise, extraction volumes have remained within the allowable limits.
- 8-12. The average and maximum production rates were provided by the applicant and reviewed and approved for EIR use by the County. These rates, which are a percentage of the maximum allowed annual production rate, are consistent with peak and average rates provided by other quarry operators (again as percentage of the total allowed production for those quarries) whose nearby quarries have had EIRs prepared (see the Blue Rock Quarry EIR and the Canyon Rock Quarry EIR cited in the RDEIR). The main use in the RDEIR of these production rates is to calculate trip generation. The traffic analysis for the original project DEIR also used average and maximum production rates when assessing impacts. Traffic impacts were assessed for a peak July day and peak October day, which is the same peak period as was assessed in the RDEIR. These rates are considered accurate for purposes of the EIR analyses, and the commenter has provided no data to show that they are incorrect, so no revision of the RDEIR is required.
- 8-13. Extraction rates are not monitored by the County on a daily basis. As for daily and/or annual extraction totals, see Response 8-7. See Response 8-12 that describes how average and maximum production rates were calculated.
- 8-14. Extraction rates are not monitored by the County on a daily basis. The Negative Declaration prepared for the 1990 Use Permit Modification assessed average daily rates of 20.6 loads per day and maximum of 24 trips per hour. See Response 8-12 that describes how average and maximum production rates were calculated.
- 8-15. The RDEIR describes the baseline production rate for the quarry. See Comment 14-2 regarding this baseline issue. How the baseline relates to former conditions of approval is not an issue for this EIR, neither are the mitigations imposed in the 1997 approval of the 1995 Use Permit Renewal. That said, in reviewing the 36 adopted Conditions of Approval, it appears that all conditions apply to the current operation of the quarry. The Notice of Determination and the Mitigated Negative

Declaration for that 1995 Use Permit Renewal are on file for public review at the offices of the County Planning and Building Services Department. A discussion of this historic approval process is not needed to provide a description of the proposed project or the environmental baseline used to determine project impacts. Finally, the RDEIR contains numerous new, revised, and/or more detailed mitigation measures than were required for the quarry when its Use Permit was renewed in 1997.

- 8-16. The project does not include daily maximum production limits for the quarry. Maximum extraction would be limited by the hours of operation (see page 69 of the RDEIR). The asphalt plant would be limited to a maximum of 3,000 tons per day and 150,000 tons per year (see page 80 of the RDEIR). The EIR assumes that these maximums will be included as a Condition of Approval (if not, then additional CEQA analysis would be required). It is assumed that production greater than these rates would result in penalties to the operator. The County would be responsible for monitoring and enforcing the maximum production rates. Also, please see Response 8-18 below regarding this issue.
- 8-17. The comment is incorrect. The proposed maximum daily and annual production rates for the proposed asphalt facility were included in the description of that facility on page 80 of the RDEIR. As described on page 80 of the RDEIR, the annual asphalt production would not exceed 150,000 tons per year, and not more than 3,000 tons per day. The proposed maximum daily and annual asphalt production rates were used for the emission calculations. These production rates are listed on each of the emission calculation sheets for the asphalt facility that are included in Appendix D of the RDEIR.
- 8-18. As described in the previous two responses, the EIR establishes maximum production rates. The applicant has provided the following additional response. "It is assumed that this comment is referencing the ability to run the asphalt plant at 300 tons/hour every day of the year which would far exceed the annual 150,000 ton annual output. Although the plant output capacity can provide this output, this output is theoretical and based on peak plant performance. It is much more likely that the actual maximum output of a '300 ton/hour' plant would only produce 250 tons/hour. More importantly, construction demands fluctuate significantly throughout the year. That being said, the size of the plant was selected to meet the peak demand during the peak season. This would occur infrequently. During the bulk of the year, this plant would operate at much lower output levels, and significantly less during the off-peak season. This is evident based on the requested overall annual production limit cited in the project description. Limiting the plant output to meet an average production rate spread over the entire year would not meet the goals of the project, as the applicant would then not be able to meet the peak construction demand periods, when asphalt is most needed." To address the concern, the applicant suggests the following condition of approval:

The applicant is limited to asphalt production of 300 tons/hour with a total maximum total annual output of 150,000 tons/year. The plant scales shall be managed by a certified weigh master. Submittal of the annual asphalt concrete

tonnage produced will be submitted to the County Planning Department annually, on July 1st of each year.

This condition has been added to the RDEIR text – see Chapter 3.

8-19. The applicant purposely removed this element from the project. It is accurate that if the site is rezoned that a concrete plant could be proposed in the future. That proposal would require amendment to the Use Permit, which would trigger a CEQA review of that new project. Given that the applicant withdrew this less controversial project component (as compared to the proposed asphalt facility), the County considered future development of a concrete plant at this site as speculative for EIR purposes.

That said, if one were to include a concrete plant as a possible future project for the purpose of assessing cumulative impacts, it would not generate any new or more substantial cumulative impacts than identified in the RDEIR. Given the total aggregate production limit for the project, a concrete plant would process some of the aggregate that would otherwise be sold as unprocessed aggregate. The concrete plant would therefore generate trips that would replace trips hauling asphalt or aggregate (as was assessed in the RDEIR). The concrete plant would not generate more noise than the asphalt plant and would not result in any increased noise impacts. A review of the original DEIR (Table 3.6-9) that included analysis of the concrete plant, shows that the concrete plant would generate less than 1% of project-generated emissions for all criteria pollutants except carbon dioxide, where it would generate approximately 1.5% of total project emissions. The concrete plant also would not have been a substantial contributor of toxic air contaminants.

The concrete plant would be expected to be developed on the site where the asphalt plant is proposed, so it would not result in any additional biological, cultural resource, geologic, or hydrologic impact. The facility could be visible from Black Bart Drive, but it would not be expected to significantly increase what is already identified as a significant and unavoidable impact. In summary, a future concrete plant would not result in any new or more substantial cumulative impacts. The original project DEIR, which included analysis of a concrete plant as part of the project, found that all project and cumulative impacts other than the four visual impacts would be less than significant. This would remain the conclusion (with the addition of the one new significant air quality impact identified in the RDEIR) if a concrete plant were not considered speculative and if it was included as a project to be assessed for cumulative impacts in the current RDEIR. The RDEIR was not required to assess this speculative future project. However, even if it had, as described above, the analysis would not have identified any new or more substantial cumulative impacts than identified in the RDEIR. As such, no revision of the RDEIR is warranted.

8-20. The impact of developing processing facilities at other quarries was assessed in the RDEIR. The commenter is referred to pages 338 to 343 of the RDEIR. There is a complete listing of the potentially significant impacts of those possible future projects to the degree that impacts can be predicted without knowing

where or when a facility might be proposed or what type of facility. As stated on page 342 of the RDEIR, because these future projects are speculative, specific impact assessments and corresponding mitigations, as warranted, would need to be done at the time an application for such a facility was filed with the County. This conclusion is also true for any possible future quarries in other locations in the County. Such projects are speculative, and assessment would be done at the time a project application is filed. The RDEIR assessed these speculative impacts to the level the potential for their occurrence allows. The commenter has provided no data that shows the analysis was incorrect. On these bases, no revision of the RDEIR is required.

- 8-21. The comment is incorrect. As described in the previous responses to his comments on the setting, the setting was accurately described in the RDEIR. The commenter, while asking questions about historic uses on the site and how analysis assumptions were developed, has not provided any data to show there are inaccuracies in the setting description. The commenter has presented no example of any "shifting" in the project description. The RDEIR meets all the requirements set forth in CEQA Guidelines §§15122 to 15131. As such the RDEIR does not need to be revised and recirculated.
- 8-22. As noted above in Response 8-21, the commenter is incorrect. The environmental setting meets all CEQA requirements. As the commenter does not provide an example of his claim in this comment, no additional response is possible.
- 8-23. As explained in Responses 8-6 through 8-22, the RDEIR provides a thorough description of the project and the environmental setting. There is no "shifting" of either the project description or the setting. In his previous comments, the commenter has not accurately identified an instance of a shifting project description, an inadequate description of the project setting, or a mitigation measure that is not consistent with CEQA requirements.
- 8-24. The annual baseline production rate used for the air quality analysis was 75,000 cubic yards *in situ* (refer to the discussion of Existing Operations in Section 3.2 of the RDEIR). The baseline average daily production rate of the processing plant at the quarry used for the air quality analysis was 217 tons per hour, and this was assumed to occur for 121 days per year, 6 hours per day. This average production rate is based on the information provided in Table 3-2 of the RDEIR.

Daily baseline emissions from truck trips were calculated using an average of 42 trucks per day accessing the quarry, or 84 truck trips. Thirty-three (33) of the trucks were assumed to be haul trucks, with the remaining 9 trucks being delivery trucks. This information was based on the data in Table 5 of the *Updated Supplemental Traffic Impact Analysis for the Harris Quarry* (Wtrans, January, 2010 – in Appendix C of the RDEIR) and the truck trip calculations contained in Appendix C of that report (the Appendix is on file for public review at the offices of the County Department of Planning and Building Services). The 42 daily trucks were for an average July day of a year with the baseline quantity of 75,000 cubic yards *in situ* mined. The average day data for July in Table 5 was

considered to be representative of the average daily truck traffic over the entire year since, as indicated in Table 1 of the Wtrans traffic report, monthly aggregate production for July was estimated to be 9.4% of the total annual production. As shown in Table 1 of that report, some months have higher percentages of production, while some months have lower percentages of production. However, if aggregate production were uniformly spread out over all months, the average monthly percent production would be about 8.5%. Thus, use of average daily truck traffic based on 9.4% of the annual production was considered a reasonable estimate of the average daily truck traffic.

- 8-25. The current operation remains covered by the conditions of the previously approved use permit #UR 19-83/95. In reviewing the 36 approved Conditions of Approval, it appears that all conditions apply to the current operation of the quarry. The Harris Quarry currently uses water for dust suppression purposes. During processing, water is added using sprinklers to increase the moisture content of the aggregate and limit dust during crushing and screening. Each stacker conveyor has a water mist system to control dust. Water for dust suppression is also sprayed by a water truck on the haul roads, quarry floor, and stockpiles. These emission reduction methods were included when calculating the baseline air emissions.
- 8-26. As discussed in Response 8-24, the baseline average daily production rate of the processing plant at the quarry was 217 tons per hour. This production rate is an average, which by definition means that there are some days with higher production rates and some days with lower production rates. It is worth noting that for a given total annual level of production, operation of the processing equipment at production rates lower than the average would result in lower emissions, but these emissions would occur for more days out of the year. Conversely, operation of the processing equipment at higher rates than the average production rate would result in higher emissions, but these emissions would occur for more days out of the year. Conversely, operation of the processing equipment at higher rates than the average production rate would result in higher emissions, but these emissions would occur for fewer days per year than use of the average production rate would indicate.
- 8-27. It is unclear what the basis for the 118 days per year of significant air quality impacts referenced by the commenter is. There are no supporting calculations showing where this number came from or what assumptions it was based on. Nor is there any other reference to this number in other parts of this comment letter.

However, assuming that the commenter is referring to the situation where the proposed quarry would operate for more days per year than the existing quarry, and therefore there would be some days when the proposed project's emissions would occur when the existing quarry would not be operated, this is indeed likely to happen. In this case the proposed project's daily emissions should be compared directly to the MCAQMD daily significance thresholds, rather than using the difference in emissions between the proposed project and existing quarry baseline emissions. Table 4.6-13 in the RDEIR provides daily emissions for the existing quarry baseline conditions and the proposed project's emissions, and the applicable MCAQMD significance threshold for daily emissions from

indirect sources. As can be seen in the table, the only pollutant where the proposed project's daily emissions would exceed the MCAQMD threshold is for NOx emissions in 2010, which is identified as exceeding the threshold. This impact was discussed in Impact 4.6-C and identified as a significant and unavoidable impact. As discussed under Impact 4.6-C, the NOx emissions are primarily from haul trucks associated with the project and would exceed the significance threshold during early years of the project. State and Federal regulations require substantial reductions in NOx emission for new diesel-fueled trucks, with even greater reductions for future model year trucks. As older trucks are replaced with newer trucks, overall truck fleet emissions are decreased. During the later years of the project NOx emissions would decrease to levels below the daily significance threshold. One possible mitigation measure to reduce NOx emissions during the early years of the project would be to require the use of newer model year trucks. However, since the trucks hauling project materials are not owned or controlled by the project applicant, this type of mitigation is not feasible. Thus, this impact was identified as significant and unavoidable.

- 8-28. See Response 11-1 to this comment.
- 8-29. This is a general comment regarding the commenter's opinion that the environmental setting is inadequate. However, the commenter provides no example of that inadequacy in this comment, so no additional response is required. That said, the EIR preparers examined the full environmental context when assessing impacts. This included examining all areas of possible impact that this commenter and others who submitted comments on the original DEIR made.
- 8-30. The comment states that the RDEIR did not include a list or an analysis of alternative methodologies presented by conflicting expert opinions. However, the EIR preparers were not presented with any "alternative methodologies" during the public review period of the NOP or at the EIR scoping meetings. If the commenter is referring to his previous comments regarding his questions regarding baseline conditions, this comment letter as well as the letters from technical consultants hired by the commenter's client that ask questions and perhaps pose alternative conclusions are only now available to the EIR preparers. It would be more than difficult to foresee these questions and recommendations at the time the RDEIR was prepared and published. That said, we have provided specific responses in this FEIR to all questions, recommendations, and comments made by the commenter and other commenters.
- 8-31. The comment is incorrect. The two cases that he cites in this comment are not, as he states, cases regarding mining projects. The first involved a major biomedical research facility that the University of California proposed to be relocated to another site in the City of San Francisco, and the other involved a huge community plan to establish a new community in Sacramento County. In both cases, the projects were very complex and the EIRs correspondingly long and complex. The Harris Quarry Expansion RDEIR is on a relatively discrete

project in a relatively unpopulated area. The setting was not complex and has been fully and clearly described in the RDEIR. We have provided specific responses to specific comments and examples that the commenter has made regarding the setting used in the RDEIR.

8-32. It is correct that the RDEIR requires the collection of baseline water quality data for runoff leaving the quarry and the processing facility site. This data will then be used to determine whether future runoff from the project site would cause any violation of all applicable water quality standards. The amounts of the various criteria pollutants in the existing runoff are not critical to understanding project impacts or what potential mitigations will be needed to comply with all requirements established in the NPDES Permit Requirements for the Industrial General Permit. For example, it does not matter whether the pH of runoff water is currently 6.5 or 7.2. What matters is whether the runoff from the proposed project is within the range allowed under the Basin Plan, and whether effluent quantities meet the RWQCB NPDES Permit Requirements for the Industrial General Permit. Baseline water quality data collected prior to construction of the project is not necessary to determine whether the proposed project would result in unacceptable water quality conditions in site runoff.

No comparison of pre-and post-project effluent quantities is required by the current Industrial Permit. The current quarry and future project both are subject to same "not-to-exceed" effluent guidelines. The following is from Order No. 97-03-DWQ:

B. EFFLUENT LIMITATIONS:

1. Storm water discharges from facilities subject to storm water effluent limitation guidelines in Federal regulations (40 CFR-4-Subchapter N) shall not exceed the specified effluent limitations.

2. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

3. Facility operators covered by this General Permit must reduce or prevent pollutants associated with industrial activity in storm water discharges and authorized non-storm water discharges through implementation of BAT for toxic and nonconventional pollutants and BCT for conventional pollutants.

Development and implementation of an SWPPP that complies with the requirements in Section A of the General Permit and that includes BMPs that achieve BAT/BCT constitutes compliance with this requirement.

The commenter is incorrect that the RDEIR does not provide data about existing water quality. On pages 137 to 138 the RDEIR describes existing BMPs used to maintain water quality at the quarry. The RDEIR notes that runoff from the quarry is captured on the quarry floor and does not drain off site. It is for this reason as well as risk of accessing the channel below the quarry, that the applicant has not been required in the past to conduct water quality sampling. The commenter is also incorrect in stating that the RDEIR impermissibly delays mitigation. The RDEIR clearly states a performance standard that the applicant

shall not cause or contribute to a violation of any applicable water quality standard and comply with all requirements established in the NPDES Permit Requirements for the Industrial General Permit. The RDEIR then goes on to list four pages of explicit actions required to meet this standard. These mitigations are intended to minimize erosion in all disturbed area; treat any pollutants generated by motor vehicles on the processing pad prior to release from the site; and capturing any pollutants that escape from fueling or asphalt operations before they can leave the site. Given EIR-recommended mitigations, it is expected that the project would not result in violation of any applicable water quality standard. The required water quality monitoring will ensure that this standard is met and, though not expected, BMPs or operating conditions can be revised if subsequent monitoring indicates that additional actions are warranted.

The RDEIR accurately describes potentially significant impacts to surface water quality and provides mitigation measures needed to meet performance standards and applicable permit requirements that the State has determined are needed to adequately protect water quality. The CEQA Guidelines state that a project could have a significant impact on water quality if it would result in a violation of waste discharge requirements. The project would not result in any violations of water discharge requirements given the mitigation measures recommended in the RDEIR. The commenter has provided no information that this analysis is incorrect or that water quality violations would occur. On these bases, no revision of the RDEIR is required.

- 8-33. It is expected that required water quality standards would be met. The inclusion of the condition that the County would have the ability to reduce production was included to make sure that it was clear that the County has this authority in the case that additional changes recommended in the sediment control plan by the RWQCB and/or the County could not or would not be made. This provision is needed because the actual construction of the large fill proposed for the asphalt plant site could result in more erosion than planned at the current preliminary design level, and additional or revised erosion control measures may be needed. It is standard for EIRs to contain mitigations that allow for changes in erosion control and similar pollution prevention plans to adapt to the final design and to the actual conditions that occur when improvements are built. We would note that the California Department of Fish and Game has not submitted any comments regarding the EIR's assessment of water quality. The RWQCB (see Letter 72) submitted a comment that the bio-swale design needed to be revised. but otherwise provided no comments in the water quality analysis of the RDEIR. The commenter has not provided any information that would indicate that the EIR analysis of water quality is incorrect nor any recommendations for additional mitigation. No revision of the RDEIR is warranted based on this comment.
- 8-34. As of the end of 2011, the NPDES General Industrial Permit (Order No. 97-03-DWQ) is still currently the enforced permit. There does exist a Draft 2011 Industrial General Permit; however, this has not been adopted and is subject to revision before final adoption (personal communication, Leo Cosentini, SWRCB, 9/6/2011). The SWRCB recommended that the EIR should address compliance with the adopted permit.

- 8-35. The County does not believe that SB 610 applies to the subject project so it was not prepared for the RDEIR. Nevertheless, the applicant opted to prepare a Water Supply Assessment. It is presented at the end of the responses to this comment letter. This WSA was peer reviewed (the peer review follows the WSA) and found to be professionally prepared and acceptable to be included in this Final EIR. To summarize the WSA, it concludes that there is adequate water to serve the project except (perhaps) for a period in the single severely dry year. The WSA concludes that mitigations already included in the RDEIR would address any potential water shortage that might occur in this worst case year. The peer review confirmed that these are accurate conclusions. This is the same conclusion that the RDEIR reached. Therefore, no revision of the RDEIR conclusions or mitigations are required,
- Water use rates were provided by the applicant following discussions with the 8-36. manufacturer of the wash plant (for plant water replacement requirements) and based on the applicant's experience for dust control and moisture conditioning of aggregate. The applicant projected a water demand of about 9.1 acre feet per year (afy). The County deemed these figures accurate and directed they be used in preparing the EIR. The EIR preparers are currently preparing an EIR for the expansion of the Mark West Quarry in Sonoma County, which contains an existing wash plant. We compared the water demand projections for the two quarries and found that the projections for the wash plant demand were identical. Overall, the Mark West Quarry would use more water for dust control because it contains substantially more disturbed area and unpaved access roads. Adjusting the dust control water demand for what Harris Quarry projects, the water demand for Harris Quarry would be about 85% of the demand projected for Mark West Quarry. The applicant states that the remaining 15% difference is due to the Harris Quarry requiring less water for moisturizing the type of rock it mines. The proposed water consumption appears consistent with the water demand projected for this other quarry. The commenter has provided no information to support his claim that the water usage assumptions are understated. The water demand described in the EIR provides a solid basis for assessing impacts to groundwater resources. No revision of the RDEIR analysis, conclusions, or mitigation are required.
- 8-37. The comment is incorrect. The discussion on page 322 of the RDEIR contains the same conclusions as are presented in Section 4.2 (Hydrology). The discussion on page 322 specifically states: *It is expected that the well would meet all project demands*. This is the same conclusions presented in Section 4.2 However, as stated on page 322, there is always the possibility that under prolonged severe drought year conditions that the well would not provide sufficient water (see the WSA that follows the responses to this commenter). To address such unexpected, but possible events, the RDEIR contains a mitigation to ensure that adequate dust control is maintained at the quarry to avoid air pollution impacts. Contrary to what the commenter states, this mitigation does not indicate a need for the applicant to purchase off-site water. The applicant has the option of such purchase as it has done in the past. However, as stated in the RDEIR, this water would only be needed in times of a severe drought year,

and off-site water likely would be unavailable under those regional conditions. The RDEIR accurately describes water availability and mitigation that could be needed in times of prolonged drought. No revision of the RDEIR is needed.

- 8-38. The commenter is incorrect in stating that the RDEIR states that there is a peak water demand of 2,400 gallons of water per day. The commenter is directed to page 164 of the RDEIR where it states water demand for dust control ranges from a peak of 7,200 gallons of water per day to a minimum of 2,400 gallons per day. Mitigation Measure 4.8-D.1 is consistent with this described water demand. Contrary to what the commenter states, there is no shift in the water demand projections. The commenter has provided no data to show that the water assessment that was peer reviewed for use in the RDEIR is inaccurate or needs to be redone (also see the WSA that was prepared consistent with the commenter's request). As such, no revision of the RDEIR is required. The RDEIR does note that the applicant could seek to purchase water from off-site sources during a prolonged drought. There is no requirement to identify "alternative sources of water" because if there is inadequate water available from on-site wells or purchasing from off-site sources, this project would need to be reduced or terminate production. This is guite different from a residential development where if water is not available, additional sources may need to be developed (since it is not feasible to "shut down" a residential development). It is also noted that the County Water Agency has been merged into the County Department of Planning and Building Services who oversaw preparation of this EIR. The Department of Planning and Building Services has concluded that the staff of the former Water Agency incorrectly identified this as an issue that needed to be addressed in the EIR. The commenter has not provided data to counter the conclusion in the RDEIR that there is adequate groundwater to meet predicted demand for normal years or show that an alternate water source would be required for normal years. In the case of a severe drought year, the project like most residents and businesses would be affected, and it is possible that production would need to be reduced or terminated for the remainder of the drought as required in Mitigation Measure 4.8-D.1. The RDEIR and the WSA accurately describes the availability of water to serve the project availability and mitigation that could be needed in times of prolonged drought. No additional studies are needed to explore alternate sources of water, since the project would be curtailed if there is inadequate water. No revision of the RDEIR is needed.
- 8-39. The comment is incorrect. As described in the previous responses, the EIR analysis of hydrologic and water quality impacts was thorough and accurate. There is sufficient information to identify impacts and develop mitigation measures that ensure that impacts would be reduced to a less than significant level. The EIR does precisely what the commenter states it assesses impacts from a worst case scenario of full project operation. There has been absolutely no attempt to "hide" any fact or possible impact. The commenter cites the well known Sundstrom case. In that case, the County included mitigations to conduct studies to identify what the possible impacts would be and then to develop mitigations for those impacts. This is far from what is presented in this RDEIR. The "study" the commenter refers to is to develop water quality information in order to revise the specific mitigations that are incorporated into this RDEIR if

runoff water quality does not meet permit requirements, and this situation is not expected to occur. The RDEIR includes no mitigations to "study" the environment or project to identify whether there would be any new impact. All potential impacts are identified and mitigation measures proposed as warranted. As noted in the previous responses, the commenter has failed to provide any evidence that the description of the setting or the analysis of impacts is inaccurate. As such, no revision of the RDEIR is required.

- 8-40. The comment is incorrect. As noted in Response 8-39, the environmental setting was correctly identified in the RDEIR. The recommended mitigation measures would reduce impacts to water quality and hydrology to a less than significant level. The commenter's comments referring to hydrology and water quality provide no examples of an inaccurate description of the setting. The analysis of the potential impacts given this setting are complete and accurate, and the mitigations are detailed and specific to the impact. The conclusions that the mitigations would reduce the impact to a less-than-significant level remain accurate. No revision of the RDEIR is needed.
- 8-41. This is a general comment regarding the baseline used for truck trips. Responses to the commenter's specific comments on traffic are presented below along with the responses to Comment Letter 11.
- 8-42. The RDEIR did not provide an evaluation of intersections in the City of Willits. The County determined that such an analysis was not warranted, and the City of Willits did not request this analysis after its review of the original DEIR or in responding to the NOP for the RDEIR. Strictly from the perspective of adding traffic, the Harris Quarry will directly add truck trips to congested intersections in the City of Willits. However, truck trips within the City of Willits are a function of the future need for aggregates at various construction sites in and beyond the City that result in through truck trips on Highway 101 and State Route 20. In addition haul truck trips from the Harris Quarry to various construction sites would displace other haul truck trips from another guarry and will likely not alter the total truck traffic within Willits. Further, only 10 truck trips from the Harris Quarry site are expected to occur during the evening commute period (4 inbound and 6 outbound) in the peak month of October as shown in Table 7 of Appendix C of the RDEIR. With 35 percent of trips assumed to be to and from the north of the Harris Quarry, 3 to 4 peak hour truck trips would be generated during October, and this minimal increase in traffic volumes can reasonably be expected to have a less-than-significant impact on existing traffic operation. For these reasons level of service assessments were not made for intersections within the City of Willits. It should be further noted that the Harris Quarry routinely provides aggregate to Northern Aggregate's concrete plant located in the southern portion of the City of Willits. The demand for aggregates to make concrete (PCC) is a function of the demand for concrete from that plant and not the amount of aggregates produced by the project. The location of the cement plant and the project site will not result in increased truck trips at key intersections in the City of Willits and will therefore not result in an impact.
- 8-43. The cited guidelines were followed.

- 8-44. See the earlier responses to the questions asked by the commenter about the project setting and assumptions used.
- 8-45. The comment about deferral of mitigation is an incorrect reading of the impact and mitigation. See subsequent Response 8-62 to this same comment.
- 8-46. The air quality analysis relied upon the MCAQMD-recommended CEQA Criteria and GHG Pollutant Thresholds (CEQA thresholds). These CEQA thresholds were discussed in an October 7, 2010 Memorandum from the MCAQMD to Planning Agencies and Planning Consultants¹ along with a copy of the recommended CEQA thresholds.² As stated in Appendix G of the CEQA Guidelines, "Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations³", where the referenced determinations are the required CEQA determinations of significance."

The air quality analysis evaluated the potential for significant air quality impacts from both direct and indirect sources. Tables 4.6-12 and 4.6-13 provide project related direct and indirect emissions, respectively, and comparison of these emissions with the appropriate direct source and indirect source CEQA significance thresholds.

The MCAQMD CEQA thresholds list separate significance criteria for operational-related direct and indirect sources. Indirect source significance thresholds are based on average daily emissions, in pounds per day, from project-related indirect sources such as passenger vehicles and heavy-duty haul trucks, while the direct source significance thresholds are based on maximum annual emissions, in tons per year. As discussed in the MCAQMD October 7, 2010 memo, the indirect source thresholds were based on the District's Indirect Source Rule (Reg 1 1-130[i1]) which sets a higher standard than the Bay Area Air Quality Management District's CEQA thresholds for ROG and NOx emissions, and that these thresholds should be used for "indirect operational emissions" (vehicle trips). For stationary source (direct source) emissions, the "MCAQMD has higher allowable emissions from stationary sources because local air quality meets all Federal Standards (particularly Ozone). The BAAQMD standards for NOx and ROG were directly based on the Federal standards for permitting in the BAAQMD. Projects in MCAQMD should use the NOx and ROG figures for MCAQMD (40 tpy)". The analysis of air quality impacts is consistent with CEQA requirements, and no revision of the RDEIR is necessary.

8-47. As discussed in Response 8-46, the MCAQMD has established separate CEQA significance thresholds for direct and indirect sources. The air quality analysis followed a methodology and used significance thresholds recommended by the MCAQMD for determination of significance, where direct and indirect source emissions are evaluated separately. However, in order to provide complete

² http://www.co.mendocino.ca.us/aqmd/pdf_files/MCAQMDCEQARecomendations.pdf 3 http://ceres.ca.gov/ceqa/guidelines/Appendix_G.html

¹ <u>http://www.co.mendocino.ca.us/aqmd/pdf_files/CEQA102010.pdf</u>

information and for informational purposes the RDEIR did provide the total combined direct and indirect source average daily and maximum annual emissions. These emissions are specifically identified in Table 4.6-9 (RDEIR p. 276) for the daily emissions and Table 4.6-10 (RDEIR, p. 277) for the annual emissions.

With respect to the 2010 NOx emissions, the RDEIR concluded that the indirect NOx emissions due to the project alone exceed the MCAQMD significance threshold and is considered a significant and unavoidable impact (RDEIR, page 281), not a less than significant impact as the commenter indicated. The analysis of NOx emissions was accurately prepared, and no revision of the RDEIR is required.

- 8-48. As discussed in the Responses 8-46 and 8-47, the MCAQMD recommends evaluating direct and indirect impacts separately and provides CEQA significance thresholds that are used for evaluating the significance of direct and indirect source emissions. Indirect NOx emissions for 2010 from the proposed project were identified as being a significant impact. These emissions would be predominantly due to heavy duty diesel haul trucks when traveling off site. As discussed in the RDEIR, since haul truck trips generated by the proposed project are independently generated by the quarry and asphalt plant's clients and the applicant does not have control over these trucks, mitigation of NOx emissions from these trucks is not feasible. As importantly (as discussed on page 281 of the RDEIR), on a regional basis the indirect emissions of NOx would not increase due to the overall reduction in vehicle miles travelled. Therefore, no mitigation is actually required to address any actual impact to air quality. The impact is significant solely because the MCAQMD threshold does not consider regionwide effects but solely effects from trucks hauling aggregate from the project. The RDEIR accurately describes indirect NOx emissions. No mitigation is provided as there are no feasible mitigations.
- 8-49. See Responses 8-12 and 11-1 regarding how truck trip estimates were developed. The commenter has not provided any data that would show that these estimates are not adequate for the purposes of the EIR analysis of traffic and air quality impacts.

The RDEIR identified diesel particulate matter (DPM) as a toxic air contaminant and that DPM has the potential to cause cancer (see RDEIR, pages 253 to 255 for the discussion of DPM). Additionally, a health risk assessment was conducted as part of the air quality analysis. In addition to other toxic air contaminants that would be emitted from the proposed project, the potential for DPM to cause increased cancer risks in the project area was assessed. As described on p. 283 of the RDEIR, "the State of California has declared diesel particulate matter (DPM) in diesel exhaust as a carcinogenic TAC, as well as having non-cancer health effects. As such, DPM emissions from the exhaust of the stationary and mobile equipment were included in the risk evaluation. Additionally, DPM emissions from haul trucks traveling on-site and along Highway 101 in the project vicinity were included." Potential increases in truck DPM emissions and increased cancer risks due to increased truck trips associated with the proposed project were specifically identified, defined and evaluated. The results of the health risk assessment (RDEIR, page 288, Table 4.6-16), which included evaluation of the project's on-site and off-site DPM emissions, showed that potential cancer risks from the proposed project would be less than the MCAQMD significance threshold of an increase in cancer risk of greater than 10 cases in a million people. The RDEIR contains a thorough and accurate assessment of DPM and other toxics and their impact on health. No revision of this analysis in the RDEIR is required.

8-50. The total indirect GHG emissions from the proposed project are 2,007 short tons per year (tons/year), or 1,821 metric tons of CO2 equivalents per year (MT CO2e/year). As shown in Table 4.6-6 the total indirect CO2 baseline emissions associated with existing conditions are 706 tons/year. The net increase of indirect CO2e emissions from the proposed project is 1,301 tons/year, or 1,180 MT CO2e/year.

As shown in Table 4.6-8 of the RDEIR, the MCAQMD significance threshold for GHGs for projects other than stationary sources (i.e., indirect sources) is 1,100 MT CO2e/year, not 1,200 MT CO2e/year as referenced in the comment. Since indirect emissions associated with the proposed project would have a net increase of 1,180 MT CO2e/year, these emissions would be greater than the significance threshold for indirect sources. As described under Impact 4.6-I (pages 297 to 299 of the RDEIR), the project would have a potentially significant impact regarding conflict with plans and regulations that address GHG emissions.

When calculating GHG emissions for the proposed project, several State and CARB regulatory requirements that have been recently adopted were not accounted for. For mobile sources these regulations include the CARB Low Carbon Fuel Standard (LCFS), which calls for a reduction of at least 10% in the carbon intensity of California's transportation fuels by 2020, and the "Pavley" regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. The Pavley regulations will reduce GHG emissions from passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016. In addition to GHG requirements affecting mobile sources, Senate Bill 2 of the First Extraordinary Session (Simitian, SB 2 (1x)), which requires California energy providers to buy 33 percent of their energy from clean, renewable energy sources by 2020, was signed into law on April 12, 2011. In 2010, 15.9 percent of PG&E's energy load was provided by renewable energy sources⁴. GHG emissions from PG&E generated electricity with the increased renewal energy source requirements will further reduce GHG emissions from the proposed project. Incorporating the above regulatory requirements into the proposed project's estimated GHG emissions would reduce the emissions to levels below the significance levels for indirect sources.

As importantly, the project would result in a decrease in regional VMT (see pages 281 and 296 of the RDEIR as well as Responses 8-48, 10-8, 10-9, and 11-7). As

⁴ California Public Utilities Commission, 2011. *Renewables Portfolio Standard, Quarterly Report,* 2nd Quarter 2011.

such, it is expected that on a regionwide basis there would be no increase in indirect emissions. Finally, Mitigation Measure 4.6-I.1 would reduce indirect emissions by more than 80 MT CO2e/year, which would reduce project-generated emissions to below the MCAQMD significance threshold.

This additional discussion of indirect GHG emissions will be added to the RDEIR text to provide additional information regarding the impact – see Chapter 3 for the revised text. This additional discussion would not result in a new impact, increase the severity of any impact, require a new mitigation, nor change the conclusions about impact significance.

8-51. The commenter is incorrect. The RDEIR does assess the cumulative impacts of possible future mining of the site in each pertinent impact section of the EIR. The cumulative impact analysis in the RDEIR explicitly addressed the potential cumulative impacts of mining the original footprint that was assessed in the original DEIR and determined whether the current proposed project would make a cumulatively considerable contribution to those cumulative impacts. As stated on page 98 of the RDEIR, there are no other projects that the County identified for use in the "list of projects" approach to the cumulative impact analysis. The EIR assessed the local cumulative impacts from the past and foreseeable future mining and use of the project site, even though the applicant has no stated interest in mining the site after the termination of the proposed Use Permit. Potential regional impacts were based on Caltrans traffic projections, and noise and air quality cumulative impact assessments also used these projections, consistent with the second CEQA approach to cumulative impacts to use planning documents describing regional impacts. The RDEIR provides a detailed assessment of the possible cumulative impacts and whether the project would make s significant contribution to these impacts. The commenter does not provide any specific examples of the purported inadequacy of any of these analyses or suggest additional analyses that should be done, so no additional response is required.

The RDEIR did not use the approach of assessing the project per buildout under the County's new General Plan as the County felt that this approach would be less useful than the one selected for use in the RDEIR. However, as discussed below, if that approach had been used, the project would have been found to have a less-than-cumulatively considerable contribution to significant impacts resulting from development under the General Plan.

The EIR prepared for the County General Plan⁵ identified 11 significant impacts from future development under that plan and 8 significant cumulative impacts where development allowed under the plan would make a cumulatively considerable contribution. These significant impacts are listed below along with a discussion of whether the project would make a cumulatively considerable contribution to any of these impacts.

⁵ PMC, County of Mendocino General Plan Update Draft EIR, 2008.

Short-Term Emissions from Grading and Construction

Impact 4.3.2 Subsequent land use activities associated with implementation of the proposed General Plan may result in short-term emissions generated by construction and demolition activities that would affect local air quality and could result in health and nuisance-type impacts in the immediate vicinity of individual construction sites as well as contribute to particulate matter and regional ozone impacts. This is considered a significant impact to air quality.

Dust emissions from grading and mining will be controlled so that visible dust does not leave the site. The project would make a less-than-cumulatively-considerable contribution to this impact.

Operational Air Pollutants

Impact 4.3.3 Negative air quality impacts associated with long-term emissions from projected growth over the planning horizon of the General Plan Update may result in violations of ambient air quality standards or create significant nuisance impacts (e.g., wood smoke). This is considered a significant impact.

The air quality analysis prepared for the RDEIR concludes that the project would not result in any significant cumulative impacts on air quality. The significant impact regarding NOx would not be significant when viewed at the regional level envisioned by the General Plan. In fact, the project would be expected to reduce regional emission of criteria air pollutants. The project would make a less-thancumulatively-considerable contribution to this impact.

Exposure to Toxic Air Contaminants

Impact 4.3.4 Subsequent land use activities associated with implementation of the proposed General Plan Update may result in projects that would include sources of toxic air contaminants which may affect surrounding land uses and/or place sensitive land uses near existing sources toxic air contaminants.

The air quality analysis prepared for the RDEIR showed that the project would not result in significant releases of Air Toxic Contaminants. On a regional basis, meeting regional demand from a modern asphalt facility would be expected to reduce emission of TACs from older plants currently meeting that demand. The project would make a less-than-cumulatively-considerable contribution to this impact.

Cumulative Regional Air Quality Impacts

Impact 5.0.3 Subsequent land use activities associated with implementation of the proposed General Plan along with existing, approved, proposed, and reasonably foreseeable development in the county would contribute to regional air quality impacts.

As stated above, project-generated pollution emissions would be less than significant and on a regional basis would be expected to reduce some emissions.

The project would make a less-than-cumulatively-considerable contribution to this impact.

Regional GHG Emissions Impacts

Impact 5.0.4 Subsequent land use activities associated with implementation of the proposed General Plan Update, in combination with existing, approved, proposed, and reasonably foreseeable development in the county, would result in the cumulative increase of greenhouse gases including CO2 emitted into the atmosphere.

The air quality analysis prepared for the RDEIR concluded that the project would emit GHGs, but the amount would be less than the Mendocino County AQMD threshold for significance. The RDEIR recommends GHG emission mitigations to ensure project compliance with pertinent GHG plans and regulations. The project therefore would make a less-than-cumulatively-considerable contribution to this impact.

Regional Impacts of Global Climate Change

Impact 5.0.5 The impacts of global climate change would cumulatively result in the potential decrease in water supply, increase in air pollutants, and increase in health hazards. The contribution of the proposed General Plan Update to this impact is considered cumulatively considerable.

As noted above, the project would make a less-than-cumulatively-considerable contribution to global climate change, air pollution, and water availability. The project would make a less-than-cumulatively-considerable contribution to future health hazards or other changes caused by global climate change.

Impacts to Sensitive Biotic Communities

Impact 4.4.2 Subsequent land use activities and growth under the proposed General Plan Update could have a substantial adverse effect on wetlands, riparian, or other sensitive biotic community or native habitat within the county.

The project plus recommended highway widening would require filling of less then 0.05 acre of wetlands and 1,400 square feet of waters of the U.S. Mitigation measures included in the project and the RDEIR would replace these wetlands and enhance other wetland and stream resources. The impact to sensitive wetland habitat would be reduced to a less than significant level. Mitigation measures are also recommended for mitigating the loss of 117 native oaks and oak woodland, and these mitigations would reduce the impact to that resource to a less than significant level. Given recommended mitigation measures, the project would make a less-than-cumulatively-considerable contribution to this impact.

Cumulative Biological Resource Impacts

Impact 5.0.6 Subsequent land use activities associated with implementation of the proposed General Plan Update, in combination with existing, approved, proposed, and reasonably foreseeable development, would substantially contribute to cumulative impacts associated with significant effects to specialstatus plant and wildlife species, sensitive natural communities, and movement corridors.

As described above, impacts to sensitive habitats and communities would be reduced to a less than significant level. The project would not affect special status species on the site. Water quality and other recommended mitigations would reduce the impact to special status fish in Forsythe Creek and downstream to a less than significant level. The project would have a less than significant level. As such, the project would make a less-than-cumulatively-considerable contribution to this impact.

Groundwater Level Overdraft

Impact 4.8.4 Subsequent land use activities associated with implementation of the proposed General Plan Update may increase the demand for water from groundwater sources and could thus result in overdraft.

The hydrologic assessments done for the RDEIR plus the Water Supply Assessment added to this FEIR show that the project has adequate groundwater resources beneath the applicant's property to meet project demand (except for the single most severe drought year) without affecting neighboring wells or springs. The RDEIR includes measures to curtail operations or otherwise reduce water demand at the site under those conditions. The project would not result in an overdraft of the local aquifer. The project would make a less-thancumulatively-considerable contribution to this impact.

Cumulative Groundwater Decline and Recharge Impacts

Impact 5.0.13 Subsequent land use activities associated with implementation of the proposed General Plan Update, in combination with existing, approved, proposed, and reasonably foreseeable development in the region, would contribute to the drawdown of underlying aquifers and decreased recharge in the North Coastal Basin.

See the discussion above regarding adequate water and how the project would not result in a permanent drawdown of the aquifer. The project would include additional impermeable surface, but the effect on this large property which is otherwise in a natural state or a quarry that detains runoff on site (where it can percolate into the aquifer) is a less than significant impact. The project would make a less-than-cumulatively-considerable contribution to this impact.

Cumulative Traffic Noise Impacts

Impact 5.0.16 Subsequent land use activities associated with implementation of the proposed General Plan Update, along with existing, approved, proposed, and reasonably foreseeable development in the region, could result in increased traffic noise conflicts. This is considered a cumulatively considerable impact. The project would not cause significant traffic noise on Black Bart Drive or Highway 101. Therefore, the project would make a less-than-cumulatively-considerable contribution to this impact.

Increased Demand for Fire Protection and Emergency Medical Services Impact 4.12.1.1 Subsequent land use activities associated with implementation of the proposed General Plan Update may increase the demand for fire protection and emergency medical services and facilities.

The project would potentially increase calls for fire and emergency service response. However, components of the project (such as the 210,000-gallon water storage tank that would be available for firefighting on the site and in the surrounding area) and mitigation measures recommended in the RDEIR reduce all impacts regarding fire and emergency medical providers to a less than significant level. Therefore, the project would make a less-than-cumulatively-considerable contribution to this impact.

Increased Demand for Law Enforcement Services

Impact 4.12.2.1 Subsequent land use activities associated with implementation of the proposed General Plan Update may result in increased demand for law enforcement services, potentially resulting in the need for additional law enforcement personnel and related facilities.

Given the nature of the project, it is not expected that the project would result in a significant increase in calls for police service, and the impact was found to be less than significant. Therefore, the project would make a less-than-cumulatively-considerable contribution to this impact.

Cumulative Increase in Demand for Fire Protection and Emergency Medical Services

Impact 5.0.18 Subsequent land use activities associated with implementation of the proposed General Plan Update, in combination with existing, approved, proposed, or reasonably foreseeable development in the county, would demand for fire protection and emergency medical services.

See the discussion above regarding impacts to fire protection and emergency medical suppliers. The project would make a less-than-cumulatively-considerable contribution to this impact.

Cumulative Demand for Law Enforcement Services

Impact 5.0.19 Subsequent land use activities associated with implementation of the proposed General Plan Update, in combination with existing, approved, proposed, or reasonably foreseeable development in the county, would contribute to the cumulative demand for additional law enforcement services and facilities.

See the discussion above regarding impacts to police services. The project would make a less-than-cumulatively-considerable contribution to this impact.

Level of Service Impacts

Impact 4.13.1 Subsequent land use activities in the county could result in additional traffic on area highways, which could exceed level of service standards Implementation of the proposed General Plan Update would contribute to this impact.

The project would not result in unacceptable levels of service on Highway 101 under cumulative conditions. The project would make a less-than-cumulatively-considerable contribution to this impact.

Cumulative Traffic Impacts

Impact 5.0.22 Subsequent land use activities associated with implementation of the proposed General Plan Update, in combination with existing, approved, proposed, and reasonably foreseeable development in the county, would result in cumulative traffic impacts on area highways.

The traffic analysis in the RDEIR shows that the project would have less than significant impacts on Highway 101. The project would make a less-thancumulatively-considerable contribution to this impact.

Increased Demand for Water Supplies and Services

Impact 4.14.1.1 Subsequent land use activities associated with implementation of the proposed General Plan Update could require additional water supplies, storage capacity, and treatment and conveyance facilities to adequately serve subsequent development.

The project will be served by on-site wells. It would not have any effect on municipal water systems. The project would make no contribution to this impact.

Cumulative Water Service Impacts

Impact 5.0.23 Subsequent land use activities associated with implementation of the proposed General Plan Update, in combination with existing, approved, proposed, or reasonably foreseeable development in the North Coastal Basin, may contribute to the cumulative demand for water supplies and associated facilities.

The project will be served by on-site wells. It would not have any effect on municipal water systems. The project would make no contribution to this impact.

To summarize, the project would not make a cumulatively considerable contribution to any of the plan and cumulative significant impacts identified for future development under the County's new General Plan. This analysis shows that there are no new significant cumulative impacts or substantially increased cumulative impacts beyond those already identified in the RDEIR.

8-52. The commenter is incorrect. The cumulative impact analysis in the RDEIR explicitly addressed the potential cumulative impacts of mining the original footprint that was assessed in the original DEIR and determined whether the current proposed project would make a cumulatively considerable contribution to

those cumulative impacts. Again, the commenter has provided no specific examples of inaccuracies or inadequacies, and no additional response is required.

- 8-53. As noted in the previous two responses, a full assessment of the possible cumulative impacts of mining the remainder of the site was presented in each pertinent resource section of the RDEIR. Section 2.2 of the RDEIR (see pages 12-15) describes the changes that were made to the original DEIR and where these changes could be found in the RDEIR. We would also note that Section 1.3 of the RDEIR (see pages 3-4) cites CEQA when stating that old comments on the original DEIR would not be responded to and that new comments needed to be submitted that were pertinent to the project addressed in the RDEIR. The commenter submitted a 25-page comment letter on the original DEIR, which he requested be "incorporated by reference" to address his concerns regarding cumulative impacts(though it was not attached to this comment letter). He has provided no specificity about what cumulative impacts concern him given the new information and analyses presented in the RDEIR. We believe that all issues relevant to understanding the cumulative impacts for the purposes of determining their potential cumulative significance and whether the project would make a cumulatively-considerable-contribution to those impacts have been presented in the RDEIR, and any specific concerns about those impacts have been responded to in this FEIR. We have reviewed the commenter's letter submitted on the original DEIR and concluded that all the issues raised about the comments on the original project have been addressed by 1) the revised project: 2) the revision of the EIR analysis to incorporate recommendations made by the commenter and other commenters: 3) revision of the setting and analysis to clarify questions raised by the commenter and other commenters; 4) a thorough analysis of the proposed project in the RDEIR; 5) a discussion of the cumulative setting that could include additional mining of the guarry, though the applicant has stated they have no interest in conducting expanded mining of the site; and 6) a discussion of whether the project would make a cumulatively-considerable contribution to the possible significant cumulative impacts. That said, to ensure legal compliance, the lengthy letter was included above and is responded to beginning at Response 8-73.
- 8-54. The consistency analysis is provided to assist the County in making its determinations about plan consistency. The consistency analysis would generally apply to all Range Lands where the combining district zoning might be sought. The potential consistencies and inconsistencies would apply to other properties, details of specific consistencies would be speculative without knowing what, if any, other quarry owners would seek this new zoning. As importantly, and as described on page 96 of the RDEIR, the County would need to approve any future rezoning to this district after reviewing a CEQA review of the rezoning and can deny such a rezoning if it has unacceptable environmental consequences. The consistency analysis provided in the RDEIR complies with CEQA requirements for such analyses, and no additional analysis or revision of the RDEIR are warranted.

- 8-55. See previous Response 8-54 as well as Responses 8-19 and 8-20 regarding the potential of future concrete facilities. The consistency of potential concrete plants at other locations with the general plan would be the same as asphalt plants, in fact, the impacts of concrete plants are less. Again, such facilities would be allowed only after CEQA review and County decision that such facilities would not have significant environmental consequences. The consistency analysis provided in the RDEIR complies with CEQA requirements for such analyses, and no additional analysis or revision of the RDEIR are warranted.
- 8-56. The EIR preparers believe the commenter has incorrectly interpreted the cited text. The general types of land use allowed include processing and development of natural resources. The cited section states that general issues include "uses determined to be related to and compatible with ranching, conservation, processing and development of natural resources, recreation, utility installations." This seems to mean that other uses that could be compatible with the listed uses may be allowed. It does not state that each of these listed uses must be compatible with each of the others, as frequently they are not (e.g., development of natural resources is typically not consistent with conservation or recreation and utility installation).

As the DEIR states, consistency with the General Plan and zoning are a legal issue that will be determined by the County Board of Supervisors. The DEIR provides an analysis of potential consistency, but it is the County Board of Supervisors that will make the final determination of consistency with the General Plan.

- 8-57. The commenter is incorrect. As described on pages 330-345 of the RDEIR, there are three active quarries that could be developed with processing facilities and only one that is of a size and in location where there is the potential for such a rezoning. The Project Alternatives section of the RDEIR assesses alternatives, including a temporary or permanent facility at another location.
- 8-58. This is a general statement about the requirement of zoning to be consistent with the County's General Plan. This consistency is a legal requirement, and the County Board of Supervisors must make this finding of consistency before adopting a Zoning Code amendment adding a new zoning district.
- 8-59. Regarding consistency of the proposed Combining District with the General Plan, the RDEIR provides a consistency analysis in the Plan Consistency section of the document. This section identifies both consistency and inconsistency with various General Plan policies. Virtually no specific planning action is typically found to be consistent with the specific language of each General Plan policy. As the court case cited on page 350 of the RDEIR states, a general plan must try to accomplish a wide range of competing interests, and the County must determine whether a project would be "In harmony" with the policies. The RDEIR analysis states that the proposed Combining District is consistent with many General Plan policies including the general uses allowed under the Range Lands land use category as set out in Policy DE-17. However, this analysis points out that the final determination of consistency will be made by the Board of

Supervisors as a part of the Board's consideration of adopting the amendment creating the Combining District. Based on the consistency analysis presented, the County determined that no General Plan Amendment is necessary.

- 8-60. CEQA does not require that the Mitigation Monitoring and Reporting Program (MMRP) be included in the Draft EIR. Because mitigations may be revised based on comments received on the Draft EIR, many jurisdictions, including the County of Mendocino, include the MMRP as part of the Final MMRP or as a separate document that accompanies the Final EIR. The MMRP will be available for public review and comment prior to the Board of Supervisors consideration of EIR certification.
- 8-61. The comment does not include any specific examples of the mitigation measures the commenter references. The RDEIR provides specific mitigation measures to address project-generated significant impacts. For some impacts the Responsible Agency may require additional or revised components of mitigation measures (e.g., see Comment Letter 72). To indicate that this standard permitting process is akin to a "future study" is incorrect. The cited Sundstrom case forbids a mitigation measure that requires a study to determine if there would be a significant impact and then to determine appropriate mitigation measures. The mitigation measures included in the RDEIR do not include any requirements for future studies. Each mitigation measure requires conformance with defined performance standards and describes how those standards will or can be met.
- 8-62. In critiquing these two air quality mitigation measures, the commenter ignores the fact that the analysis of the impact found that the impact would be less-thansignificant. The analysis was based on the equipment proposed for use by the applicant. The discussion concluded that if different equipment than what was proposed (and assessed in the RDEIR) was included in the final list submitted to the County AQMD when it sought the Authority to Construct and the Permit to Operate and the emission levels of that equipment exceeded what was assessed in the RDEIR, then additional CEQA analysis would be required. The RDEIR determined that the equipment proposed for used would have a less-thansignificant impact. The two mitigations simply clarify existing legal requirements, that is, if there is a change to a project after EIR certification but prior to operation that would cause unforeseen or more significant impacts than were assessed in the EIR that additional CEQA analysis is required. If that were to occur, gualified experts would need to prepare the additional CEQA analysis, and it would undergo CEQA-required public review. The commenter is incorrect in concluding that mitigation measures for this proposed project were deferred to the AQMD.
- 8-63. Please see Responses 8-61 and 8-62. The RDEIR includes distinct performance standards. It does not require future studies of impacts nor defer mitigation for significant impacts to studies done by other agencies. The RDEIR contains quite specific and detailed measures to address the project's significant impacts.
- 8-64. The commenter is incorrect. The RDEIR clearly identifies what mitigations must be implemented to reduce potentially significant impacts to a less than significant

level. The MMRP will describe the implementation and monitoring requirements, and the Findings and Conditions of Approval that the Board of Supervisors must adopt will describe how the final mitigation measures will mitigate (or not) the identified impacts.

- 8-65. The commenter is incorrect. What the commenter does not state is that Mitigation Measure 4.4-B.1 contains five specific measures to reduce the safety risk. The mitigation the commenter cites was added to make sure that these measures are adequate and/or that conditions do not change to increase the risk, since definitively quantifying traffic hazard is difficult. If that monitoring indicates that the recommended safety measures are not adequate and there remains a safety hazard, then the cited mitigation measure requires that the County limit project operations or require construction of a partial or full highway interchange at the intersection. This is an adequate mitigation measure and does not need revision in order to mitigate the impact.
- 8-66. The commenter is incorrect. As stated in earlier responses to the commenter's opinion that the EIR project description is "shifting," this is not the case, and the commenter has not shown any data or evidence to show otherwise. The lengthy alternatives analysis meets CEQA requirements of comparing feasible project alternatives to the proposed project to determine if one or more of these alternatives would reduce or eliminate significantly project impacts.
- 8-67. The commenter is incorrect. The RDEIR assessed seven project alternatives. The RDEIR clearly explains the potential for segmenting the project and developing an asphalt plant on an alternate site (see pages 384-388 of the RDEIR). It clearly states that if the County were to determine that an asphalt plant should be developed elsewhere, then it could approve one of several project alternatives that did not include an on-site asphalt plant. The applicant would then need to determine whether it wished to purchase or lease one of the alternative sites identified in the RDEIR or other sites as they become available and pursue approvals for an asphalt plant at that site.
- 8-68. The staff of the County Building and Planning Department were queried. In addition, LCA has been preparing EIRs in Mendocino County since 1978 (29 CEQA documents prepared in the County, including CEQA documents for all incorporated cities and the County) and recently completed the EIR for the Ukiah Valley Area Plan and is quite familiar with the County and potential sites for industrial development. No efforts were made to identify potential other quarry sites as such a study was not deemed necessary by the County to assess the impacts of the proposed project. Finally, the individuals and groups opposed to the project have not identified other alternate sites. More importantly, the RDEIR clearly states that if the County finds that the impacts of allowing an asphalt plant at this site are significant and unacceptable, then it can approve a project alternative that does not include an on-site asphalt plant.
- 8-69. As suggested, the RDEIR does address the alternative of a temporary plant in the Highway 101 right-of-way (see page 388). Again, the County could approve

a project alternative that does not include an onsite asphalt plant and a temporary plant could be applied for.

- 8-70. Please see the responses to Mr. Grassetti's letter (Comment Letter 10) where responses to these opinions are provided. Based on those responses, the alternatives analysis does not need to be revised nor recirculated. Also, the RDEIR assumptions about the Willits Bypass are correct (see Response 10-7).
- 8-71. The comment is inaccurate. The RDEIR provides a detailed analysis of seven project alternatives. The commenter has not identified any new alternatives not considered in the RDEIR. The RDEIR identifies a project alternative that is environmentally superior to the proposed project. The alternatives analysis is fully consistent with CEQA; the commenter has not provided any factual evidence to show that it is not, and it neither needs to be revised nor does the RDEIR need to be recirculated because of the project alternatives analysis. The RDEIR fully meets the core rationale for CEQA to provide decisionmakers and the public with sufficient information on project impacts, mitigation measures, and project alternatives to make an informed decision about the project and its alternatives.
- 8-72. In earlier comments, the commenter has stated that the project description is "shifting;" assumptions used for analyses were not explained or incorrect; certain impact analyses were incorrect; certain mitigation measures might not be successful or enforced; and the assessment of project alternatives was incorrect. To each of these comments, we have provided specific responses to explain how the analyses were prepared; how impact determinations were arrived at and mitigations developed; and how the project alternatives analysis provided a clear comparison of impacts for seven alternatives. We believe that the RDEIR fully meets CEQA requirements. The original DEIR, the hearings held on that DEIR. the RDEIR, the comments submitted on the RDEIR, the FEIR, and the subsequent hearings on the FEIR and the project merits have provided and will continue to provide substantive information that will be used to inform the decisionmakers when they decide whether to approve the project or one of its alternatives. The commenter as well as other commenters have not provided new information that would result in the need to substantively alter the impact analyses, the mitigations, or the conclusions of the RDEIR. It is understood that the commenter may disagree with some of these analyses and the conclusions, and these disagreements are presented in this FEIR for the decisionmakers to review and consider. If a new RDEIR was prepared, it would essentially be the same as this RDEIR - no substantively different information or analyses would be included, and recirculation of yet another iteration of the EIR is neither warranted nor required.

The following are responses to the commenter's comment letter submitted on the original DEIR in February 2007, which he has incorporated by reference as regards deficiencies in the original DEIR that could affect the cumulative impact analysis included in the RDEIR.

- 8-73. The first seven pages (Sections I and II) are comments on procedural matters and on the project description. These comments do not apply to the current project nor the cumulative impact analysis. No response is needed to these comments as they deal with a different project and a different project description. Section III includes comments on the environmental baseline that was used for the original analyses. These comments do not apply to this project as a revised environmental baseline was developed and presented in the RDEIR.
- 8-74. The bio-retention facility has been redesigned to meet current project requirements. It would potentially need to be expanded or redesigned at the time a new application is submitted to conduct future mining. The project would have been terminated by this date, so the project would make a less-than-cumulatively-considerable contribution to any water quality impacts from future mining.
- 8-75. The issue of the lack of baseline water quality information is the same issue raised in the commenter's new letter (see Response 8-32). In addition, by the time future mining occurred, there would be extensive baseline water quality data available.
- 8-76. Issues concerning hydrologic threshold criteria refer to the original project impacts. Additional water quality requirements would be required at the time a new use permit is applied for. The project would have been terminated by this date, so the project would make a less-than-cumulatively-considerable contribution to any water quality impacts from future mining.
- 8-77. Blasting impacts on water quality were assessed in the RDEIR.
- 8-78. The requested permit timeframe has been shortened, and the comment no longer applies.
- 8-79. The RDEIR contains an analysis of project impacts on stream water flow and found it to be less than significant. The cumulative impact is discussed on page 172 of the RDEIR and was found to be less than significant.
- 8-80. The RDEIR contains a completely revised and expanded assessment of impacts to groundwater resources, and the impact is less than significant. The cumulative impact could be significant and would need to be addressed further at the time a new use permit is sought. However, as described on page 173 of the RDEIR, the project would make a less-than-cumulatively-considerable contribution to that potential, cumulative impact.
- 8-81. The wetland inventory was completely redone for the RDEIR. Future mining of the site would not affect additional wetlands beyond those impacted by the project.
- 9-82. The discussion of the impact to the Forsythe Creek fishery was expanded and revisited in the RDEIR. The impact would be less than significant for the revised project. Future mining could affect water quality and salmonids (see page 198 of

the RDEIR), but the project would make a less-than-cumulatively-considerable contribution to this possibly significant cumulative impact. That impact would be further assessed at the time a new use permit application was filed.

- 8-83. The loss of oak woodlands was revised in the RDEIR and additional mitigation was provided. The impacts would not be substantially greater for cumulative mining as the footprint would not expand substantially. It is expected that similar mitigation for oak loss would be required at the time of the subsequent CEQA review. In any case, the project would make a less-than-cumulatively-considerable contribution to that cumulative impact.
- 8-84. As mentioned above, the baseline has been redefined in the RDEIR, and comments on the baseline used in the original DEIR do not apply.
- 8-85. The proposed highway improvements meet all Caltrans requirements, and CalTrans has stated that the improvements would reduce project and cumulative impacts to the highway to a less than significant level.
- 8-86. See Response 8-42 to this same comment.
- 8-87. All this information has been provided in the RDEIR for the revised project.
- 8-88. The RDEIR contains a full assessment of air quality impacts for the revised project, and this analysis was done using MCAQMD guidelines and significance thresholds. It also contains an analysis of the cumulative impacts (pages 295-301 of the RDEIR). As the project would be complete prior to any future mining, emissions from the project would not combine with future emissions generated by future mining. The project would make no contribution to any cumulative air quality impacts regarding criteria air pollutants or toxic air contaminants.
- 8-89. The cumulative impact analysis was revised for the RDEIR. It includes analysis of GHG impacts on climate change (see pages 295-300 of the RDEIR).
- 8-90. The issue of consistency of the new zoning district with the County General Plan has been revised previously by the commenter – please see Responses 8-56 to 8-59 above. The RDEIR assesses the long-term impacts of adding such a district.
- 8-91. Energy use for the revised project, including cumulative energy use impacts, is presented on pages 345-347 of the RDEIR.
- 8-92. Mitigation measures were revised to address the revised project as well as comments received on the original DEIR. Mitigation measures that would be required for any future mining of the site would be developed based on existing local and regional conditions occurring when that future application is submitted. In addition, these questions have no bearing on the adequacy of the RDEIR cumulative impact analysis.

<u>Response to Letter from Louis Sciocchetti, California Department of Forestry and Fire Protection (CAL FIRE)</u>

4-1. This Memorandum states that the Department had no comment on the RDEIR. As no questions are asked regarding the RDEIR, no additional response is required.

8-93. These comments on project alternatives are similar to those raised in earlier comments from this commenter – see Responses 8-66 to 8-71. In addition, these questions have no bearing on the adequacy of the RDEIR cumulative impact analysis.



January 11, 2012

Ms. Tina Wallis Clement, Fitzpatrick & Kenworthy 3333 Mendocino Avenue, Suite 200 Santa Rosa, CA 95403

Subject: Final Draft Water supply Assessment for the proposed Harris Quarry Expansion

Dear Ms. Wallis,

Please find attached the subject document. The objective of this Water Supply Assessment is to determine whether existing water supplies meet the projected water demand of the proposed Harris Quarry expansion. We utilized historical rainfall, runoff, and temperature data and modeling to estimate water supplies and demands for typical, single dry, and multiple dry years.

The results of our comparison of groundwater recharge estimates and future demand indicated that the water supply is sufficient to meet demand in all years except the single severely dry year when projected future demand exceeds supply by about 50-percent. However, accounting for spatial uncertainty in contributing area, precipitation and temperature indicated that there may be adequate recharge even in the severe drought conditions to supply adequate water for the proposed project. During the most severe drought conditions, if groundwater supplies are unable to meet full demand we understand that the applicant will reduce water use by using lignin, modifying the processing/washing operation schedule to concentrate on wetter season conditions, or reduce production rates as appropriate so that there will be adequate water during extremely dry years.

Sincerely,

Steven Deverel, Ph.D., P.G. Principal Hydrologist



John Fio Principal Hydrologist



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Water Supply Assessment

Proposed Harris Quarry Expansion

Summary of Findings

The objective of this Water Supply Assessment is to determine whether existing water supplies meet the projected water demand of the proposed Harris Quarry expansion. The assessment documents project water supplies and demands for typical, single dry, and multiple dry years. We utilized historical rainfall, runoff, and temperature data for the following periods to represent the three year types.

Typical Year: Average conditions for the period 1961 through 2011(water years 1961-2011).

Single Dry Year: 1977.

Multiple Dry Years: 1988 through 1992.

The planned water source is groundwater from the applicant's well. The well extracts water from fractures in the surrounding bedrock aquifer. The fractured rock allows ready infiltration of rainfall and surface water, but the volume of water stored in the fractures, the rate of recharge, and groundwater-flow directions are difficult to quantify. Several springs are located north and west of the planned pumping well, but water levels and aquifer test results suggested that the water tapped by wells and springs in the area have limited connection if any at all. Annual recharge is considered available as discharge from springs and wells during and following the rainy season, but the carry over between years as groundwater storage is probably small.

HydroFocus employed soil moisture budget modeling to estimate monthly groundwater recharge to the bedrock aquifer during the period 1961-2011. The comparison between the most conservative groundwater recharge estimates and future demand indicated that the water supply is sufficient to meet demand in all years except possibly the single dry year represented by 1977. In this severely dry year, projected future demand may exceed supply by about 50-percent (997,800 gallons, or 3.06 acrefeet). During these most severe drought conditions, if groundwater supplies are unable to meet full demand the applicant will reduce water use by using lignin, modifying the processing/washing operation schedule to concentrate on wetter season conditions, or reduce production rates as appropriate so that there will be adequate water during extremely dry years. Less conservative supply estimates and an analysis of data uncertainty suggest that recharge could be greater, indicating that groundwater may be adequate to supply the proposed project even in extremely dry years.

Harris Quarry Expansion Water Supply Assessment (DRAFT)

January 11, 2012 Page 105



1.0.0 Introduction

1.1.0 Background

Effective January 1, 2002, Senate Bills 610 and 221 (SB 610 and SB 221) amended state law to improve the link between water supply availability information and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures which seek to promote more collaborative planning between local water suppliers and cities and counties. The statute requires a lead agency to consider detailed water availability information prior to making a decision on the development application for a project. The statute also requires that this information be included in the administrative record that serves as the evidentiary basis for the lead agency's approval decision on these projects.

Under Senate Bill 610 (SB 610), water supply assessments (WSA) must be furnished to local governments for inclusion in documentation for certain projects (as defined in Water Code 10912 [a]) subject to the California Environmental Quality Act (CEQA). The WSA is required to include an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.

This report describes the WSA for the proposed Harris Quarry expansion located in Willits, California. Project details and an assessment of potential environmental impacts are provided in "*Harris Quarry Use Permit and Reclamation Plan, Revised Draft Environmental Impact Report*" (RDEIR).¹ The objective of this WSA is to determine whether the groundwater supply meets the projected water demand of the proposed project, in addition to existing and planned future uses. The WSA is required to document project water supplies and demands for typical, single dry, and multiple dry years during a 20-year projection. Because the quarry permit renewal/modification is for 30-years, this WSA addresses the water supplies and demands for a 30-year projection. A brief description of the Harris Quarry expansion is provided below in **Section 1.2**, followed in **Section 1.3** by a discussion of SB 610's applicability to the project. The water supply is documented in **Section 2** and **Section 3**, and the demand for water is summarized in **Section 4**. **Section 5** and **Section 6** document dry year supply and demand, respectively. **Section 7** is the Water Supply Assessment and includes the Determination of Sufficiency.

1.2.0 Project Description

Harris Quarry is located in Mendocino County, and occupies approximately 11 acres between the southwest side of Highway 101 and the north side of Forsythe Creek (**Figure 1**). The proposed project would expand the quarry floor approximately 30.6 acres to the west and relocate the Willits washing plant to the quarry site. Currently, the quarry operators (Northern Aggregates, Inc. – NAI) have utilized self-supplied water from wells and springs to process aggregate and suppress dust, but the proposed

¹ Leonard Charles and Associates, May 2011



project will rely solely on the applicant's well for the water supply (Harris Quarry Production Well, referred to as "Well 1").

As a result of the proposed expansion and washing plant operation relocation, water use is expected to increase from its current level of 1,313,500 gallons per year (4.03 acre-feet per year) to 2,957,800 gallons per year (9.08 acre-feet per year) – a net annual increase of about 5 acre-feet per year (125-percent net increase). The RDEIR concluded the applicant's well provides an adequate water supply to meet projected demand, and the proposed increase will not significantly affect neighboring wells or springs. Nevertheless, the applicant has formulated plans to reduce their water consumption if necessary by using lignin to suppress dust from the quarry floor², modify the operation schedule, or reduce production to reduce water consumption as appropriate.

1.3.0 SB 610 Applicability

1.3.1 Is the project subject to CEQA?

The application is a "project" and is subject to CEQA because it requests discretionary approvals that may result in a direct physical change in the environment.

1.3.2 Is it a "project" as defined by the water code?

SB 610 and SB 221 are companion measures requiring detailed water availability information to include in the administrative record for applications that meet specific criteria. In this situation, SB 610 defines a project³ as one that demands an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.⁴ Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to the CEQA.

1.3.3 Has an assessment already been prepared that includes this project?

There are no prior WSA's that include the Harris Quarry expansion.

1.3.4 Is there an adopted Urban Water Management Plan?

A foundational document for compliance with both SB 610 and SB 221 is the Urban Water Management Plan (UWMP). As the name implies, UWMP's are prepared by California's urban water suppliers to support their long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands over a 20-year planning horizon considering normal, dry, and multiple dry years.

There is no urban water supplier or public water system responsible for supplying water in the vicinity of the site, and therefore there is no UWMP that applies to the project and no domestic water suppliers

² Lignin is a natural timber by product that can be used as a dust suppressant; the applicant has requested that they be allowed to use either water or lignin for dust control.

³ Both CEQA and SB 610 define "project", however, they define this word differently. Please compare Water Code section 10912(a) to Public Resources Code section 21065.

⁴ A 500 dwelling unit project is generally acknowledged as requiring 150 to 250 acre-feet per year of water – approximately 48.9 to 81.5 million gallons per year.



whose service area includes the project site (**Figure 2**). The City of Willits, which is the closest urban area, is located almost 4 miles north of the quarry site. Other documented water agencies are located similarly distant: Pine Mountain Mutual Water (about 4 miles northeast of the quarry), Ridgewood Water System (almost 2 miles southeast of the quarry), and Redwood Valley County Water District (almost 10 miles southeast of the site). The Local Agency Formation Commission of Mendocino County (LAFCO) indicates there are no plans for public water supply in the vicinity of the Harris Quarry site.

Because no UWMP is available, this WSA assessment must therefore be prepared using information from other sources and reports. Thus, the current and proposed future demand for water must be obtained from existing and proposed Harris Quarry requirements reported in the RDEIR (Table 3-2 in the RDEIR).

1.3.5 What information should be included in the assessment?

The WSA is required to include an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts. However, water is self-supplied because there is no public water supply for the project. This WSA is still required and is required to discuss a projected 20-year water supply available during normal, single dry, and multiple dry water years. Because the water supply is groundwater, there are also additional special documenting requirements (see **Section 2.2** below), and the WSA must determine whether the available supply meets the proposed project's water demand and whether it is sufficient for existing and planned future uses.

2.0.0 Document Wholesale Water Supply

Because there is no urban or public water retailer in the area, and groundwater will be supplied entirely by the applicant's well, there is no wholesale water supply to document.

3.0.0 Document Supply

The current water source is self-supplied groundwater from a well and spring; the planned water source is self-supplied groundwater from the well only. In terms of water rights, this usage falls under the category of a correlative right that automatically accrues to landowners overlying a "percolating" groundwater resource such as occurs at the quarry and its surrounding areas.⁵ Correlative groundwater rights are not quantified, and all overlying landowners have an equal (correlative) right to use the available yield of the groundwater system⁶ (Bachman and others, 2005). All water rights in California are

⁵ Percolating groundwater occurs broadly in alluvial groundwater basins and upland, fractured-rock groundwater systems. It is distinct from groundwater flowing in known and definite channels that are typically closely associated with streams.

⁶ Bachman, S., C. Hauge, R. McGlothlin, K. Neese, T. Parker, A. Saracino and S. Slater, *"California groundwater management, 2nd edition,"* Groundwater Resources Association of California, Sacramento, CA, 2005.



further subject to the restriction that the use of water be reasonable and beneficial. Use of groundwater for processing aggregate and incidental dust control meets that standard.

3.1.0 Existing and Projected Supply

The actual and projected water supply was obtained from Table 3-2 of the RDEIR and is summarized in **Table 1** below. Existing annual water use has been 1,313,500 gallons per year (4.03 acre-feet per year); the projected annual water use is 2,957,800 gallons per year (9.08 acre-feet per year). The projected water use will be the same each year of the 30-year permitting period.

Water Supply Sources	Existing	Proposed 30-year Supply
Wholesale	0	0
Groundwater	1,313,500	2,957,800
Local Surface Water	0	0
Transfers	0	0
Exchanges	0	0
Reclaimed	0	0
Other	0	0
TOTAL	1,313,500	2,957,800

Table 1. Existing and Projected Annual Water Received in Normal Years, in gallons.

3.2.0 Groundwater Supply

Current water supply sources include groundwater extracted from below the project site and groundwater discharged from the California Division of Forestry (CDF) spring; however, the project applicant plans to rely solely on site groundwater from Well 1. Special requirements are needed because the project supply is groundwater, and because there is no UWMP which would provide the required groundwater details, this WSA must also include the following information.

- Description of the groundwater basin proposed to supply the water, including information as to whether the basin has been adjudicated and/or identified as over drafted or projected to become over drafted under present conditions.
- The amount and location of groundwater pumped for the past five years from the basin based on reasonably available information.
- The amount and location of self-supplied groundwater projected to be pumped from the applicant's well based on reasonably available information including, but not necessarily limited to, historic use records.
- An analysis of sufficiency of groundwater from the basin from which the project will be supplied to meet the projected water demand of the proposed project.



3.2.1 Groundwater Basin Information

Harris Quarry is located within the Forsythe Creek Watershed (**Figure 1**). Forsythe Creek is a tributary of the Russian River and flows to the southwest of the quarry area; a tributary of Forsythe Creek runs directly south of the active quarry site. The quarry site is not located within a California Department of Water Resources (DWR) defined groundwater basin, but is located in the area between two defined basins – Little Lake Valley (Basin Number 1-13) and Ukiah Valley Groundwater (Basin Number 1-52).⁷ The rocks in this area form hydrologic boundaries adjacent to the Little Lake Valley and the Ukiah Valley basins. Because the quarry is not located in a defined basin, the area does not have a groundwater management plan nor has it been identified as over drafted or projected to become over drafted under present conditions. However, groundwater in the area is known to be limited to local rock fracturing and consequently considered generally scarce; wells in fractured rock usually have a low production rate (less than 5 gallons per minute) and small capacity to store water. The following sections briefly discuss the geology and hydrologic characteristics of the water bearing rocks that supply water to wells in the area and estimated monthly recharge that potentially contributes groundwater to Well 1.

3.2.2 Water-Bearing Rock Zone Characteristics

Harris Quarry is located in the Coast Range Geomorphic Province, south of a north-south trending structural depression that roughly follows the Maacama fault zone. Exposed Franciscan Formation exists in the quarry area and its surroundings; Franciscan greenstone beneath the quarry, highly weathered and fractured Franciscan sedimentary and meta-sedimentary rock north of the quarry (where Well 1 is located), and undifferentiated Franciscan rock west and south of the quarry. The relationships between land surface topography, surficial geology, and well and spring locations is shown in **Figure 3** (modified Figure 4.2-2 from the RDEIR). A few minor faults have been identified within the quarry area, and percolating groundwater is thought to move and accumulate in the open joints associated with the sheared and fractured rocks along faults. This type of groundwater system is characterized conceptually as a fractured bedrock aquifer with smaller, intermixed perched aquifers. The perched aquifers are found in surface soils overlaying weathered bedrock, and they are often seasonal and variably located throughout the area (RDEIR).

In the vicinity of Well 1, the bedrock zone is formed by highly weathered, fractured, and sheared greenstone of the Franciscan Formation. The greenstone exposed at the active quarry face is reportedly "intensely fractured" (fracture spacing ranging from 0.1 to 0.3 feet) to "slightly fractured" (fracture spacing ranging from 1 to 3 feet). Many of these fractures are reportedly filled with calcite or quartz.⁸

The RDEIR reports that the occurrence of groundwater within the fractured bedrock is variable. The fractured rock allows ready infiltration of rainfall and surface water, but the volume of water stored in the fractures, the rate of recharge, and groundwater-flow directions are difficult to quantify. Unproductive zones are locally present where faulting fractures do not appear to be interconnected with other water-bearing fractures. Furthermore, the fault planes provide lateral boundaries that likely inhibit flow through the fault and direct flow within the fractures. Several springs are located north and

⁷ California Department of Water Resources, "Groundwater Basins in California," Bulletin 118, 2004.

⁸ Blackburn Consulting, Inc." Engineering Geology and Geohazards Report, Harris Quarry, Willits, California," 2004.



west of the quarry in an area mapped as having fractured bedrock, but water levels and aquifer test results suggest that the water tapped by these individual wells and springs have limited connections – if connected at all.

The aquifer tests at the quarry, most recently conducted in 2009 (LSCE, 2010)⁹, evaluated impacts of pumping from Well 1 on surrounding wells and springs. Although well water levels and spring flows generally declined during the test, LSCE concluded that the declines were seasonal and the data did not indicate any of the declines were attributable to the well pumping. LSCE analyzed the aquifer test results and estimated the physical properties of the aquifer and concluded that groundwater in the fractures generally behaved as confined. Their analysis indicated that the aquifer could be represented locally by transmissivity and storativity values of 530 gpd/ft and 0.001, respectively. LSCE compared their results with an earlier test conducted in 2007 (Rau, 2007)¹⁰ and concluded there are seasonal variations in the drawdown and recovery of the pumping well.

Although the locally fractured rock apparently allows recharge to rapidly infiltrate, the volume of water storage available within the fracture network is assumed relatively small. This assumption is consistent with LSCE's (2010) low storativity estimate and the RDEIR which characterized the area as water short noting that residents west of the quarry truck water in during the summer and fall of low rainfall years. Annual recharge is therefore available as discharge from springs and extraction wells during and following the rainy season, but the carry over between years as groundwater storage is probably small.

3.2.3 Recharge

Infiltrated rainfall less the water consumed by plants results in groundwater recharge to the rocks that provide water to wells and springs in the quarry area. HydroFocus employed a Soil Moisture Budget (SMB) accounting model¹¹ to estimate monthly groundwater recharge during the period October 1960 through September 2011 (water years 1961-2011). Details on model input data sets, SMB accounting methods, and modeling results are provided in **Appendix A**. Because of uncertainty in the area that recharges to the water-bearing rocks tapped by Well 1, the SMB model was employed to estimate recharge in the three water budget areas shown in **Figure 4**.

(1) The largest water budget area is delineated by the upper Forsythe Creek watershed, which is an approximately 1,700 acre tributary drainage area to Forsythe Creek that includes both the quarry site and Well 1. This water budget area is substantially greater than the area that probably contributes recharge to Well 1. Recharge occurring in this area can also discharge from springs and other existing extraction wells. The recharge estimate for this budget area may be useful for determining the

⁹ Luhdorff and Scalmanini, "Potential Impacts of Increased Groundwater Pumping to Supply Proposed Harris Quarry Expansion," November 19, 2010.

¹⁰ Rau and Associates, "Well Test for Quarry/Processing Plant Environmental Review at Harris Quarry South of Willits," 2007.

¹¹ Phillips, S. P., S. N. Hamlin, and E. B. Yates, *"Geohydrology, water quality, and estimation of ground-water recharge in San Francisco, California, 1987-92,"* Water-Resources Investigations Report 93-4019, U. S. Geological Survey, Sacramento, CA, 1993.



sufficiency of groundwater to supply the quarry and other uses conceivably affected by quarry operations.

(2) A second water budget area is delineated by the quarry property [the area identified as "Harris Quarry and Dutra Properties" in Figure 2 "Location of Wells and Springs Monitored during Harris Quarry Aquifer Test" in LSCE (2010)]. About 15-percent of the area is located outside the Forsythe Creek watershed and was excluded from the water budget calculation. Similarly, almost an additional 4-percent of the area was located outside the upper Forsythe Creek watershed budget area and was therefore also excluded from the water budget calculation. As explained in the RDEIR, for CEQA purposes allowable groundwater use is considered equal to the long-term average natural rainfall recharge to the groundwater body that occurs within the parcel in question. This budget area therefore provides a relatively conservative estimate of recharge that is potentially available to Well 1 and allowable for CEQA purposes (i.e., the simulated volume of recharge will be smaller than for the entire property area).

(3) A third water budget subarea is delineated by a general overlapping between the upper Forsythe Creek watershed, the quarry property boundary, surface geology, soil and land use cover, and the area within approximately 0.5-mile of Well 1 [the 0.5-mile radius represents an approximation of the contributing area for Well 1 based on LSCE's (2010) 180-day peak-season drawdown simulation]. Figure 4 shows the general overlap of these areas and the resulting third water budget area. No springs or pumping wells exist in the area other than Well 1, and this area may be a reasonable representation of the area that contributes recharge to Well 1. Accordingly, comparisons between annual recharge in this area to projected quarry water use estimates the sufficiency of Well 1 as a supply source for the quarry.

Simulated historical recharge for these three water budget subareas is summarized below in **Table 2** for average (1961-2011), dry year (1977), and multiple dry years (1988-1992). On average, annual historical recharge in the upper Forsythe Creek watershed was over 300 million gallons per year (over 900 acrefeet per year). In the other two water budget areas (the quarry property boundary and estimated contributing area to Well 1), the simulated annual historical recharge was more than 92 and 28 million gallons per year, respectively (about 280 and 86 acre-feet per year). Annual recharge decreases during dry years, with the greatest decline occurring in the severe drought year of 1977 (a decline in recharge of approximately 90 percent or more).

	Year Type				
Subarea	Normal	Dry	Multiple Dry		
	1961-2011 average	1977	1988-1992 average		
Upper creek watershed	317	12.9	138		
Quarry property 92.4		1.96	40.0		
Contributing area	28.2	3.86	13.7		

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The values in **Table 2** represent the most reliable estimates based on the best estimates for model input parameter values. However, there is uncertainty in the simulated recharge rates reported in **Table 2** due to model input parameters that are imprecisely known. **Appendix A** includes sensitivity test results that assess the uncertainty in simulated recharge for the three budget areas.

3.2.4 Groundwater Use

This WSA is required to document the amount and location of groundwater pumped from the basin for the past 5-years based on reasonably available information. Additionally, the WSA is required to document the amount and location of groundwater projected to be pumped for the project.

For the past 5-years, the quarry has presumably relied on 1,313,500 gallons per year (4.03 acre-feet per year) of groundwater from well Well 1 and the CDF spring (existing water use reported in the RDEIR). The locations of this well and spring are shown on **Figure 4**. Most of the area surrounding the quarry is zoned by the County as Range Land, and is retained for livestock grazing, ranching, residential (clustering or one dwelling per 160 acres), agriculture, forestry, cottage industries, natural resource development, recreation, and utility installations. Land and water use therefore have probably not changed substantially in the past 5 years.

HydroFocus estimated average, total annual water use for the upper Forsythe Creek watershed budget area. Most of the demand for water is met with groundwater either pumped from wells or collected from springs. Based on existing land uses, estimated existing groundwater use for this budget area is about 67.4 million gallons per year (207 acre-feet per year). Existing on-site groundwater use by the quarry is reported in the RDEIR to be 1,313,500 gallons per year (4.03 acre-feet per year), and existing off-site water demand in the upper Forsythe Creek budget area is estimated to be approximately 66 million gallons per year (203 acre-feet per year).¹² Based on the estimated recharge rates in **Table 2**, groundwater is sufficient to meet water demand in the Forsythe Creek budget area in most years. During extremely dry years, the quarry may be required to use lignin, modify the processing/washing operation schedule to concentrate on wetter season conditions, or reduce production rates as appropriate to match the supply available for their use.

Other than the proposed quarry expansion, there are no planned water use increases in the near future. The Local Agency Formation Commission of Mendocino County (LAFCO) indicated there are no proposals for annexations within a 2 mile radius of the quarry site (Frank McMichael, personal communication, January 5, 2012). The County of Mendocino Planning & Building Services Department

¹² HydroFocus estimated off-site water demand for existing parcels based on a map of known water sources within two miles of Well 1 prepared by Rau and Associates and reproduced for this WSA as **Figure 5**. The map indicates 144 parcels exist in the watershed budget area having an average area of 11 acres each. Unit demand rates for single family dwellings utilized by the Ukiah Valley Water Supply Assessment (500 gallons per day, which is equivalent to 0.56 acre-feet per year) were used to estimate indoor water use for residences located on these parcels. Maximum potential outdoor water use was estimated using the maximum ETo assuming all outdoor demand was irrigated grass. The area of applied water was estimated using the average percent irrigated area visually estimated from aerial photographs (3-percent).



identified three projects requiring EIRs: Harris Quarry, Garden's Gate, and Kunzler Terrace Mine. Both the Garden's Gate and Kunzler Terrace Mine sites are located on the outskirts of Ukiah, and are therefore outside the area potentially influenced by pumping from Well 1. Hence, all of the increase in planned future groundwater use in the water budget area is attributed to the proposed pumping increase from Well 1. Total planned future groundwater use is 69.1 million gallons per year (212 acrefeet per year) assuming projected quarry water use is 2,957,800 gallons per year (9.08 acre-feet) and future off-site water use does not change from existing conditions at 66 million gallons per year (203 acre-feet per year). Based on the estimated recharge rates in **Table 2**, groundwater is sufficient to meet this use in most years. During extremely dry years, the quarry may be required to use lignin, modify the processing/washing operation schedule to concentrate on wetter season conditions, or reduce production rates as appropriate to match the supply available for their use.

4.0.0 Document Demand

Because all water used is groundwater, existing and planned future demand was described previously in **Section 3.2.4** above. The demands for the three water budget areas are repeated and summarized below in **Table 3**.

Table 3. Existing and Planned Demand for Water for three water budget areas, in million gallons per	
year.	

Sector	Watershed area		Quarry property		Well recharge area	
Sector	Existing	Planned	Existing	Planned	Existing	Planned
On-site	1.3135	2.9578	1.3135	2.9578	1.3135	2.9578
Off-site						
Indoor	26.3	26.3	0	0	0	0
Outdoor	39.8	39.8	0	0	0	0
Total	67.4	69.1	1.3135	2.9578	1.3135	2.9578

5.0 Document Dry Year Supply

Annual groundwater supply was based on estimated historical annual recharge (**Appendix A**). The historical record includes single dry (1977) and multiple-dry (1988-1992) years. We utilized simulated recharge for the water budget area delineated by the quarry property in **Table 2** to represent dry year(s) supply because it provides (1) a quantitative estimate of allowable groundwater supply for CEQA purposes; and, (2) the simulated recharge rate is smaller than the other two budget areas and therefore provides the most conservative dry-year supply estimate. The single dry year (1977) and multiple dry year (1988-1992 average) supply for the quarry property budget area is 1.96 and 40.0 million gallons per year, respectively.



6.0 Document Dry Year Demand

For this WSA, we assumed total demand does not change appreciably during dry years and water use is identical to what is reported in **Table 3**. During dry years, the demand for outdoor water use likely decreases as private well owners increase water use efficiency and limit outdoor water uses in an attempt to preserve water in storage. Using average year demand to represent demand in dry years is therefore conservative in that it likely over-estimates the actual demand during the dry years.

7.0 Analysis of Sufficiency

The objective of the WSA is to determine whether existing water supplies meet the projected water demand of the proposed Harris Quarry expansion. The assessment is required to document project water supplies and demands for typical, single dry, and multiple dry years during a 20-year projection. We utilized historical rainfall, runoff, and temperature data for the following periods to represent the three year types.

Typical Year: Average conditions for the period 1961 through 2011(water years 1961-2011).

Single Dry Year: 1977.

Multiple Dry Years: 1988 through 1992.

Table 4 summarizes estimated water supply, represented by simulated groundwater recharge, and proposed demand for normal, single dry, and multiple dry years. The most conservative supply estimates indicate there is adequate water to meet existing demand. The most conservative supply estimates are also adequate to meet proposed future demand except possibly in the single dry year, when demand exceeds supply by about 50-percent (997,800 gallons, or 3.06 acre-feet). However, the applicant's project description indicates they will reduce water use by using lignin, modifying the processing/washing operation schedule to concentrate on wetter season conditions, or reduce production rates as appropriate so that there will be adequate water during extremely dry years.

Table 4. Comparisons between estimated water supply and future demand ^a for the water budget area
that contributes recharge to Well 1 (in million gallons per year).

		Normal (1961-2011 average)	Single dry (1977)	Dry (1988-1992 average)
Existing	Supply	28.2	1.96 ^b	13.7
Existing	Demand	1.3135	1.3135	1.3135
Draigstad	Supply	28.2	1.96ª	13.7
Projected	Demand	2.9578	2.9578	2.9578

a: Quarry water use is the sole demand in the water budget area.

b: Recharge for property boundary budget area used instead of the contributing area to Well 1 because it is the lowest recharge rate of all three budget areas considered.

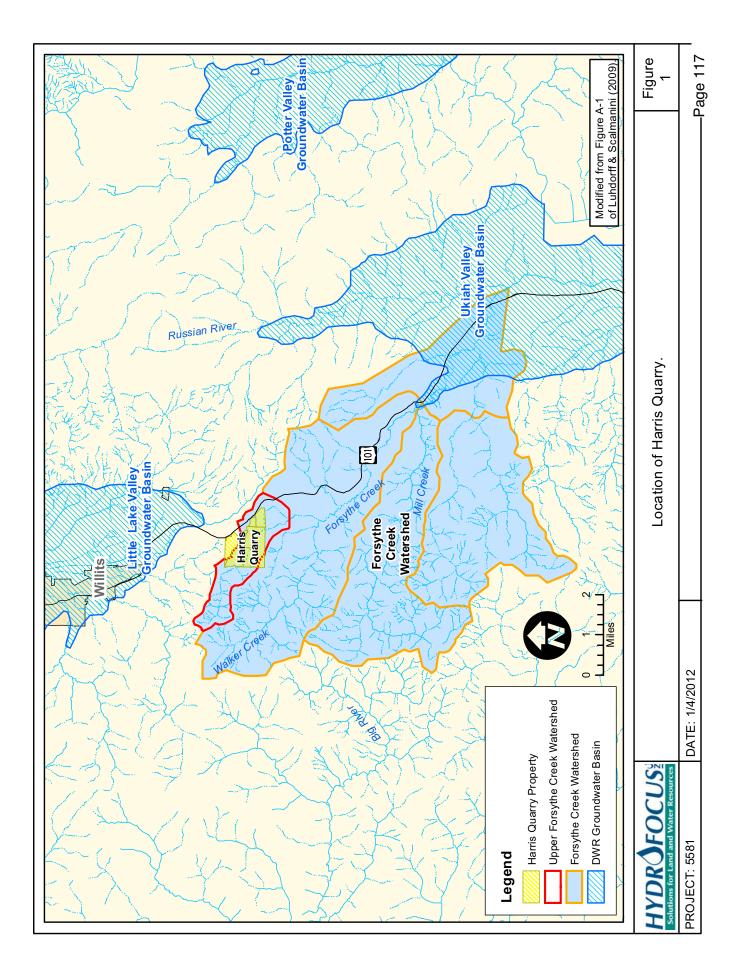
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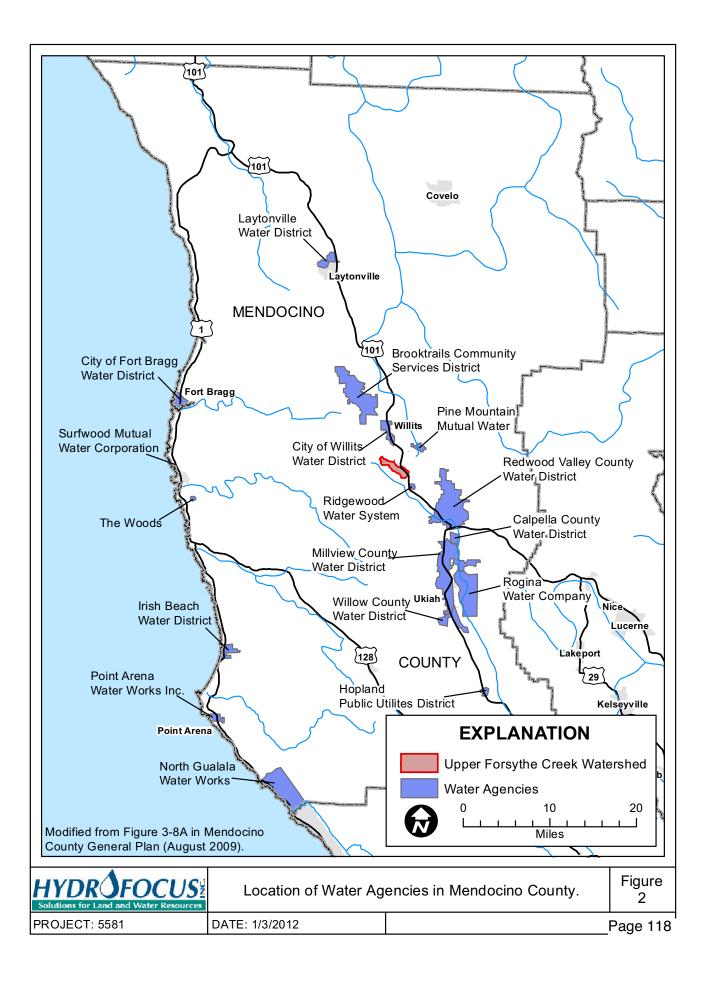


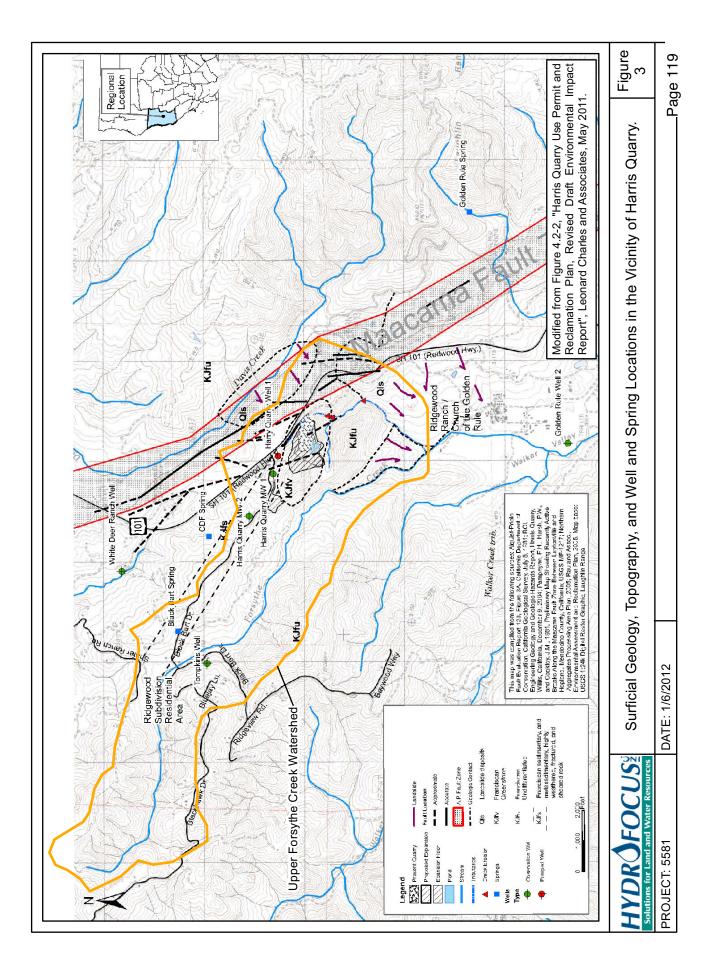
This analysis of sufficiency is conservative in that it utilizes the lowest simulated recharge values to estimate the quarry water supply. For example, in **Table 4** the estimated single dry year water supply is based on results from the quarry budget area rather than the budget area that is estimated to contribute recharge to Well 1. As described in **Appendix A**, the single dry year recharge for the contributing area to Well 1 is substantially greater (3.86 million gallons), and suggests a dry year supply that is sufficient to meet the water demand of the proposed project. Similarly, uncertainty in simulated recharge values as affected by spatially variable precipitation and temperature can also influence the analysis of sufficiency.

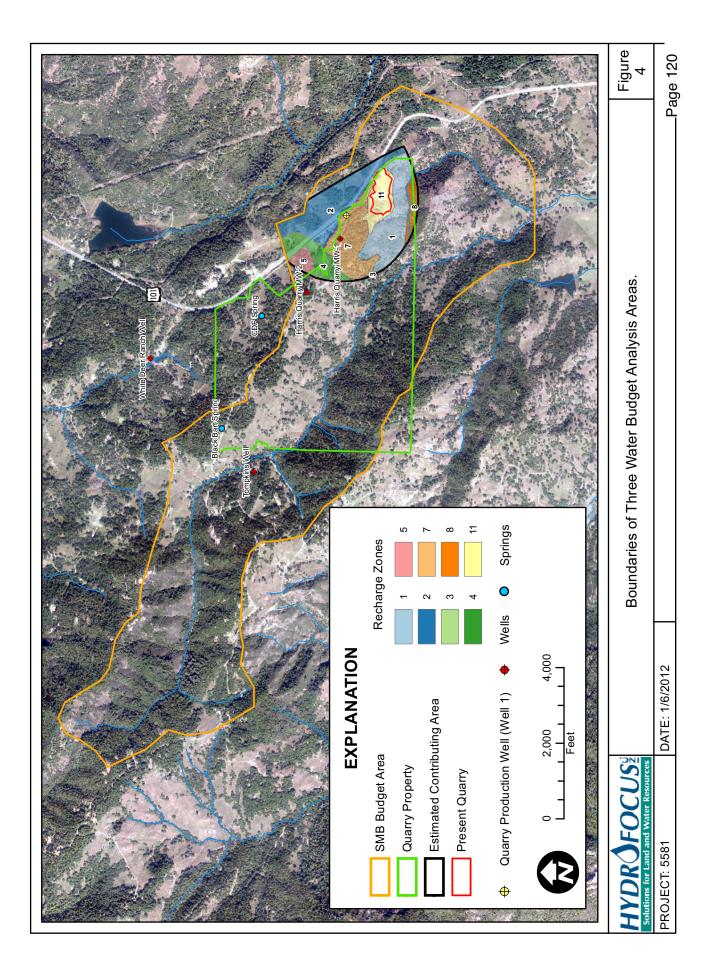
Specifically, the sensitivity test results reported in **Appendix A** suggest that rainfall and temperature data from a climate station located closer to the quarry reveal that single dry year recharge is about one-half an inch greater than represented by the supply numbers in **Table 4**, which translates into an increase in estimated dry year supply from 1.96 to 10.6 million gallons. Hence, it is possible that adequate recharge occurs even in the severe drought conditions to supply adequate water for the proposed project¹³.

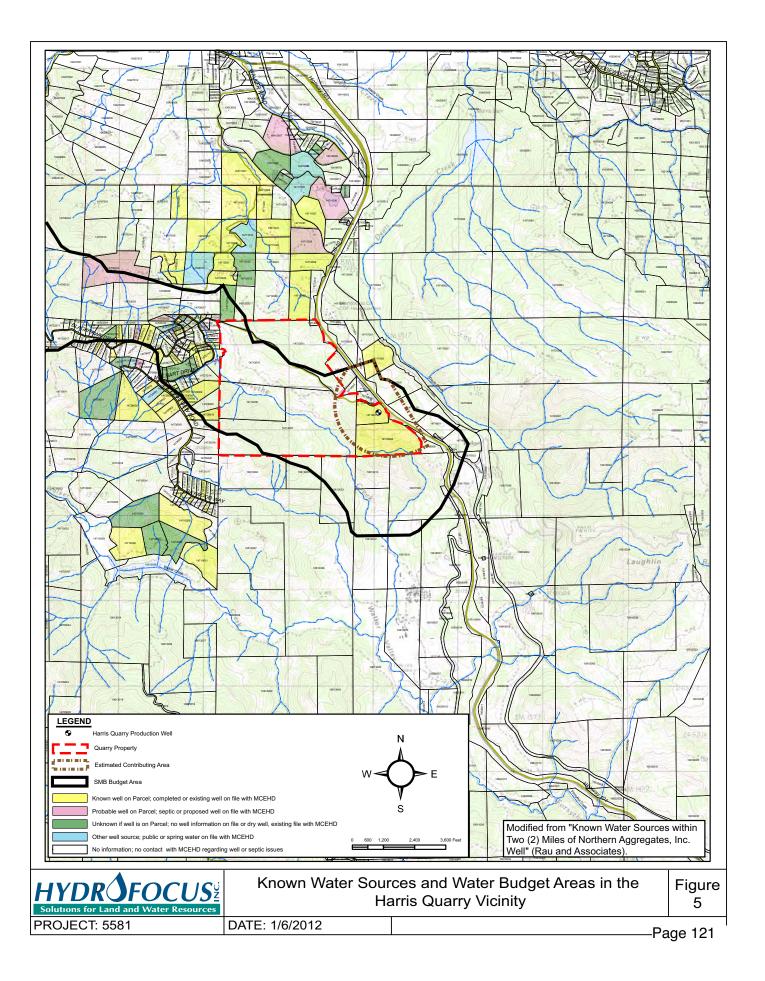
¹³ It is noteworthy that the data from this climate station (Willits Howard) was incomplete and it was necessary use a regression relation to estimate values for periods of missing record. The available data indicated yearly rainfall was about 10 % greater than the Willits 1 NE station that was used to generate the results shown in Table 4. The station is located near Willits about 5.5 miles north of the quarry and has a period of record beginning in 1960. The Willits Howard RS is located closer to the quarry than Willits 1 NE (about one mile north of the quarry), but its period of record is much shorter relative to Willits 1 NE (daily rainfall data was not available until October 1985, and daily temperature data did not begin until November 2009). As a result, 54-percent of the monthly rainfall data and 96-percent of the monthly temperature data had to be synthesized using a correlation to complete the 51-year analysis (333 and 589 of the 612 total values had to be synthesized, respectively).











Subject:	Peer Review of Water Supply Assessment for the Harris Quarry Expansion
Prepared for:	Leonard Charles / LCA
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Document revi	
Date: Februa	ery 6, 2012
<u>.</u>	OF CALIFOR

Summary

Balance Hydrologics (Balance) conducted a peer review of the Final Draft Water Supply Assessment (WSA) for the Proposed Harris Quarry Expansion (HydroFocus, January 11, 2012) to evaluate whether it contained sufficient and accurate information for inclusion in the Final EIR being prepared for the quarry expansion. Basic data for the WSA was provided in an aquifer test report titled Potential Impacts of Increased Groundwater Pumping to Supply Proposed Harris Quarry Expansion (Luhdorff and Scalmanini, November 19, 2010), which was also peer reviewed. The both reports were found to be concise, well written technical documents that provide sufficient information and analysis to support the conclusion of the WSA. Balance concurs with this conclusion that there are sufficient groundwater resources to serve the project except for possibly during a severely dry year when the applicant may need to reduce water use.

Background

Section 10910 of the California Water Code (as revised by Senate Bill 610, or SB610) requires the preparation of a Water Supply Assessment (WSA) for a project subject to the California Environmental Quality Act (CEQA) to address the increased water use over existing conditions. Per Section 10912(a) of the California Water Code, projects required to prepare a WSA are those that propose any one or a combination of the following:

- 1. A proposed residential development of more than 500 dwelling units;
- 2. A proposed shopping center or other business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- 3. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- 4. A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- 6. A mixed-use project that includes one or more of the projects specified in this subdivision; and
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

A WSA is required for the Harris Quarry expansion project because it is an industrial and processing site occupying more than 40 acres and subject to the CEQA review process.

This memorandum provides a peer review of the WSA for the proposed Harris Quarry expansion project (HydroFocus, January 11, 2012), including Appendix A: Simulated Groundwater Recharge, and the following supporting documents:

- 1. Potential impacts of increased groundwater pumping to supply proposed Harris Quarry expansion (Luhdorff & Scalmanini Consulting Engineers, November 19, 2010); and,
- 2. Well Test for Quarry/Processing Plant Environmental Review at Harris Quarry South of Willits (Rau and Associates. 2007).

California Water Code Section 10910(4)(d) requires a discussion of existing water supply entitlements, water rights, or water service contracts relevant to the public water system(s) that would (or may) supply water to the project. Also, Section 10910(2)(f) requires that "If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment:

- 1. a review of any information contained in the Urban Water Management Plan (UWMP) relevant to the identified water supply for the proposed project; and
- 2. a description of any groundwater basin or basins from which the proposed project will be supplied."

The WSA for the proposed Harris Quarry expansion project identified the following applicability of these requirements:

- The project applicant plans to rely solely on site groundwater from Well #1 (Section 3.2.0). This usage falls under the category of a correlative right that automatically accrues to landowners overlying a "percolating" groundwater resource such as occurs at the quarry and its surrounding areas (Section 3.0.0).
- There is no urban water supplier or public water system responsible for supplying water in the vicinity of the site, and therefore there is no UWMP that applies to the project and no domestic water suppliers whose service area includes the project site (Section 1.3.4).
- The quarry site is not located within a California Department of Water Resources defined groundwater basin... the area does not have a groundwater management plan nor has it been identified as overdrafted or projected to become over drafted under present conditions... groundwater in the area is known to be limited to local rock fracturing and consequently considered generally scarce (Section 3.2.1).

Hydrologic Setting

Included for context in the memo is the location map (Figure 1) and the geology, topography, and well and spring location map (Figure 3) from the WAS. Harris Quarry is located immediately west of U.S. Route 101 ("Highway 101") near the top of the Ridgewood Grade (at mile marker 40.77), about 4 miles south of Willits, California. It is situated along the southwestern edge of a steep sided, northwest-trending ridge. The regional geology consists of complexly folded, faulted, sheared and altered bedrock (Franciscan Complex), comprised of a variety of rock types, predominately sandstone, shale, chert and conglomerate with hard, resistant meta-volcanic (greenstone) and meta-sedimentary (metagraywacke) rock in the project vicinity (DEIR Section 4.1). The quarry mines greenstone for aggregate (see attached Figure 3).

Groundwater at the site is primarily in bedrock fractures, and is encountered periodically in open fractures during quarrying. Groundwater flow is related to fractures, faults, joints, bedding surfaces and other structural features in the bedrock. In addition, surface colluvial soils and zones of weathered bedrock can contain some local, seasonal, and often perched groundwater. The Franciscan Complex is a complexly folded, faulted and fractured sequence of rock materials. The Franciscan has experienced a long history of tectonic movement along the boundary of the Pacific and North American tectonic plates. The nearby Maacama fault, located 0.3 miles to the east, generally follows a trough created by weakened rocks; it has deformed an area around the fault that includes the Harris Quarry site. Fault lineaments of the Maacama Fault Zone cross the subject property. Fault and fracture features can act as water barriers, creating high groundwater on one side of the fault or fracture and depressed groundwater on the opposite side of the fault trace. In addition, the more pervasively sheared and fractured rock along faults often provides the open joints where downward percolating groundwater can move and accumulate. Springs are typically common along such fault zones, where fault movement has offset or disrupted subsurface pathways of groundwater movement. (DEIR Section 5)

General Comments and Recommendations

The WSA is a concise, well written technical document, and generally easy to understand for a professional in a hydrologic or related field. The WSA assessed projected water availability during normal conditions (1961-2011 average), a single severely dry year (1977), and multiple dry years (1988-1992) and concluded that the water supply is sufficient to meet demand for the proposed quarry expansion project in all years except possibly the single severely dry year represented by 1977. This conclusion was based on a reasonable assumption that the proposed water source (onsite Well #1) draws water from a fractured bedrock aquifer with limited groundwater storage, requiring recharge each year from rainfall. This assumption eliminates potential water supply contributions from any groundwater storage 'carry-over' from the previous year(s), a conservative assumption minimizing initial water availability. The conclusions of the WSA are accurate and Balance concurs with them.

Groundwater recharge was estimated for a 51-year period of record (1961-2011) utilizing monthly soil moisture budget (water balance) calculations, a method commonly applied in hydrologic investigations going back to the 1950's. The technical approach and reasoning supporting the assumptions and selection of model parameters are reasonable and verifiable, and the sensitivity analysis¹ included in the recharge model predictions (Section 4 of Appendix A) provides boundaries on the results – estimated best and worst case scenarios – which accounts for data limitations and minor differences regarding the basis for parameter selection. It is instructive to look at the worst-case scenario (Table A-6 of Appendix A) in addition to Table 4 of the WSA when evaluating water supply sufficiency relative to the projected demand of 2.96 million gallons per year. For comparative purposes, units common to Table 4 are presented in the following table.

¹ A sensitivity analysis is a valuable inclusion to any modeling exercise that provides credence to the results but unfortunately is often omitted in many reports.

Rainfall Condition	Groundwater Recharge Estimate		
	Conservative	Worst Case	Best Case
	(millior	n gallons per y	ear)
Upper creek watershed (1,702 acres)			
Long-term average (1961-2011)	317	260	403
Extreme drought year (1977)	12.9	7.74	39.8
Multi-year drought average (1988-1992)	138	97.4	255
Quarry property (528 acres)			
Long-term average (1961-2011)	92.4	76.5	117
Extreme drought year (1977)	1.96	0.22	10.7
Multi-year drought average (1988-1992)	40.0	28.1	73.4
Well #1 contributing area (196 acres)			
Long-term average (1961-2011)	28.2	24.5	35.9
Extreme drought year (1977)	3.86	2.90	6.04
Multi-year drought average (1988-1992)	13.8	11.0	22.9

Table A-6 of WSA Appendix A revised for comparison to WSA Table 4.

The worst case estimate supports the WSA conclusion that the water supply is sufficient to meet demand for the proposed quarry expansion project in all years except possibly the single severely dry year represented by 1977. In addition, as a rough estimate of cumulative water supply sufficiency, Section 3.2.4 of the WSA evaluates the cumulative groundwater demand of off-site wells within 2 miles of the quarry well at 69.1 million gallons per year (including the demand from the quarry well) and compares it to the groundwater recharge to the upper creek watershed area. Worst case estimate for the upper creek watershed area supports the WSA cumulative effect conclusion that the water supply is sufficient to meet demand for the proposed quarry expansion project in most years except for severely dry years.

Based on these conservative estimates of groundwater recharge, it seems reasonable for planning purposes to anticipate quarry operations to reduce groundwater use demand during extremely dry years, as is proposed in the WSA.

Information on water supply Well #1 and the aquifer from which it draws groundwater are presented in the cited report "*Potential impacts of increased groundwater pumping to supply proposed Harris Quarry expansion*" (LSCE, 2010), and were used as a basis for the WSA. The LSCE 2010 report is a well-written technical document that includes the following information: a) existing and proposed water demand and water supply sources for the quarry, b) an analysis of the results of a 7-day constant-rate pumping test conducted at Well #1 during September 2009, c) an analysis of the results of a 72-hour constant-rate pumping test at Well #1 that was previously conducted during March 2007 by Rau and Associates, and d) simulations of projected groundwater drawdown from pumping Well #1 for the proposed project conditions. The LSCE 2010 report provides comprehensive analyses of the aquifer from the perspective of pumping Well #1. Groundwater studies generally include analyses of multiple independent lines of evidences and the LSCE 2010 report applies three lines of reasoning: 1) a physical understanding of the geology, aquifers and flow of water; 2) an account of historical groundwater use; and 3) drawdown modeling predictions. A fourth line of reasoning commonly employed but not included in the LSCE 2010 study is an analysis of the chemical composition of surface waters

and groundwater sources (wells and springs). An analysis of the ionic signatures and any unique constituents can identify similarities and differences ('fingerprint') between water sources and provide additional supporting information to characterize the aquifer captured by the water supply well. This approach is particularly useful when characterizing groundwater flow in a fractured bedrock aquifer, which (as qualified in the LSCE 2010 report) is typically unlike flow in porous media (as in an alluvial groundwater basin), and thus compromises the applicability of techniques for analyzing and simulating groundwater drawdown and flow. However, such an analysis is not necessary, and the LSCE 2010 report provides a reasonable basis for assumptions made in the WSA.

Specific Comments and Suggestions for Clarification

The WSA uses a soil-moisture budget approach to calculate monthly recharge to groundwater. Details of the recharge modeling are presented in Appendix A of the WSA. The modeling is appropriately documented but it would have been additionally helpful (particularly to the lay or short-of-time reader) to include an illustration summarizing the components and data sources for the model that would precede Figure A-2. Similarly, a companion table (or figure) that summarizes the monthly results for each water-balance component (rainfall, runoff, actual evapotranspiration, soil moisture, and recharge) would have been equally helpful for easy understanding, though not required for a technical analysis of the issues.²

The sensitivity analysis illustrates the importance of on-site (or near-site) rainfall data and the related uncertainty. The closest station to the site has significantly higher rainfall but the period of record is short. If a synthesized record for this site is used – monthly totals correlated to the station with the longest record – then the simulated recharge increased 26 percent. Rainfall data was shown to have the highest level of uncertainty. The modeled results are, therefore, a conservative estimate of recharge.

Evapotranspiration also has a relatively high level of uncertainty. There are various techniques of estimating evapotranspiration. The WSA soil-moisture budget model used the Blaney-Criddle method for estimating Potential Evapotranspiration (PET), which is based on mean air temperature data and the percentage of annual daylight hours for each month. The Actual Evapotranspiration (AET) was calculated from PET with the soil available water content for a given root zone.³ This method is a well establish (since the 1950's) and requires soil survey data and professional judgment for selection of coefficients. Reference Evapotranspiration (ETo) is similar to PET but uses the modified Penman method (in California), which is based on measurements of solar radiation, wind speed, air temperature and relative humidity at a reference site of well-watered actively growing closely clipped grass that is completely shading the soil. ETo is converted to PET with a vegetation-specific coefficient. Data from ETo station throughout California are available from the California Irrigation Management Information System (CIMIS). The WSA-simulated ETo was considerably less than CIMIS published values for the region, which was partially accounted for in the WSA from locally lower air temperatures (p. A-6). In addition, though, the dry and sometimes windy⁴ Northern California inland valley climate would also account for high ETo values, not measured with the Blaney-Criddle method. The lower estimated evapotranspiration would potentially provide more water for recharge. Plant coefficients were adjusted in the sensitivity analysis to

² A monthly water balance table for each of the three modeling scenarios would clarify how rain was proportioned, and accompanying graphs could be included (with months across the x-axis and inches on the y-axis).

³ Actual evapotranspiration is said to equal potential evapotranspiration when there is ample water.

⁴ Early growing-season afternoon winds are common, caused by the temperature difference from the cooler coast to the warmer inland valleys. Rising warmed air over the inland valleys draws in air from the coast, generating afternoon winds.

show an 18 percent decrease in recharge, and an adjustment to root depths showed a 3 percent decrease in recharge. Similarly, adjusting the soil's available water content by 0.03 inches per inch showed an 11 percent different in recharge. The worst case recharge estimate (noted above) accounted for higher evapotranspiration, and thus a conservative estimation of recharge.

Plant roots would tend to promote groundwater recharge, particularly in wooded areas where roots are larger and extend deeper. The effect of this recharge mechanism was not assessed, rendering the modeled estimate more conservative.

Simulated runoff estimates were based on Natural Resources Conservation Service rainfall-runoff relationships, which are considered to be an approximation requiring verification with on-site runoff observations and/or regional stream gaging data. Runoff was appropriately verified with gaging records from Willits Creek above Lake Emily (USGS station ID 11472160), a basin of similar size to the upper Forsythe Creek watershed, located 8 miles to the north of the study area. The report discussion would have benefitted from more comparative information for this basin in terms of geology, soil types, and vegetation cover to illustrate its applicability, and to perhaps better explain the difference in reported runoff as a percent of rainfall. The runoff information provided, however, is sufficient to assess recharge estimates.

The WSA assumes that recharge to the fractured bedrock aquifer will be available for pumping by the water supply Well #1. Examples of recharge are identified in the data presented in the aquifer test report (LSCE, 2010). It correctly interprets the drawdown data during the March 2007 pumping test as wet-season recharge (vertical leakage), which was not detected in the dry-season pumping test data collected during September 2009. In addition, precipitation occurring on October 12-15 and 19, 2009 during the recovery phase of the pumping test was also detected in the monitored wells as a water level rise. The recharge event, though, did not compromise the analysis of the recovery data from the pumping well.

The WSA estimated area of recharge contributing to Well 1 (reported as 196 acres) was based on the LSCE 2010 simulation for 120-day peak operating season (p. 16 and Figure 18). The estimated contributing area to Well #1 was based on a) the theory of flow in porous media applied to pumping data at Well #1, b) an assumption that the Maacama Fault Zone in an impermeable boundary, and c) professional judgment by experienced hydrogeologists. It is reasonable to apply a relatively high uncertainty to this estimate of recharge area. The following reported site observations and hydrogeologic understanding provide a relative context to this estimate:

- The drawdown modeling results in the LSCE 2010 report should be viewed, at best, as a general indicator, a schematic or cartoon of a possible trend related to pumping Well #1, simply because groundwater flow in fractured bedrock and faulted terrain is complex, and applying theory based on flow in porous media is an over-simplification.
- MW-1 is located 633 feet (0.12 miles) northwest from Well 1, and MW-2 about 2,285 feet (0.43 miles) northwest from Well 1. Neither monitoring well showed a drawdown effect from pumping Well #1 for 7 days at 15 gallons per minute (LSCE, 2010, p. 8; Figures 4 and 5). However flow from the CDF spring, located 2/3 of a mile northwest from Well #1, declined only during the first day of pumping Well #1 but then recovered while the well continued to pump (LSCE, 2010, p. 9; Figure 9). This drawdown response illustrates the complex nature of flow in the fractured bedrock aquifer.

- After the first day of pumping Well #1 at 15 gallons per minute, the drawdown data indicated a lower permeability boundary likely due to a change in lithology or a fault. The distance to the permeability boundary was estimated to be in the range of 400 to 1,260 feet from the well. Small faults are mapped about 400 feet from the well in the easterly and westerly directions, and the Maacama Fault Zone is about 900 feet east from the well. (LSCE, 2010, p. 13). In addition, "...there appears to be an impermeable 'dam' in the rock formation lying downslope from the tested well. This supposition is evidenced by a 500-foot deep dry well which was drilled near the scale shack. There was no well log..." (Rau and Associates, 2007, p. 1).
- It is generally understood that groundwater tends to flow along faults with limited flow across them, and wells located near strike-slip faults, such as the Maacama Fault Zone, often draw on deeper groundwater flowing vertically along the fault zone. This potential deeper source of groundwater supply to Well #1 would not have been accounted for in the WAS, which is a conservative approach similar to the exclusion of potential water supply contributions from any groundwater storage 'carry-over' from the previous year(s).

Finally – as a thought to provide context for interpretation of the WSA results prior to final reclamation – judiciously reclaiming the quarry to enhance recharge can increase the volume of recharge entering the ground, particularly during very dry years, when little water recharges through the thick soils in this region, but runoff from hardened or rock surfaces can be directed into basins or other locations where dry-year recharge can be doubled or tripled. This 'drought-year premium' can be an important positive element in planning for any quarry where recharge during the driest years may limit sustainability, and should generally be encouraged in reclamation planning.



455 Capitol Mall, Suite 210 Sacramento, CA 95814

MEMORANDUM

TO:	Mendocino County Board of Supervisors and Planning Con	mmission
FROM:	Chip Wilkins	RECEIVED
DATE:	August 18, 2011	AUG 1 9 2011
RE:	Proposed Mineral Processing Combining District	BY PLANNING & BUILDING SERVICES Ukiah, CA 95482

I am writing this memo on behalf of my client Keep The Code, an unincorporated association of local residents concerned about the Harris Quarry Use Permit Project and 9-1 Reclamation Plan ("Project") proposal to amend the Mendocino County Inland Zoning Code to include a Mineral Processing Combining District. Keep The Code's concerns regarding the proposed new District are twofold. First, the Revised Draft Environmental Impact Report ("RDEIR") for the Project fails to include a programmatic analysis of the environmental impacts that could potentially result from the new District. Second, the 9-2 RDEIR's suggested findings regarding the proposed District's consistency with the County General Plan would provide a basis for concluding that manufacturing of products associated with metallic and nonmetallic materials, geothermal development, oil and gas is permissible under the County General plan on land with Range, Agricultural, and Forest Lands designations - over 90% of all privately owned land in the County. As discussed below, such a result not only turns the County General Plan on its head, it is also unlikely to withstand judicial scrutiny. Therefore, we request that the Board consider and deny the proposed legislative change to the Zoning Code prior to continuing environmental review for the Project for these reasons as more fully discussed below.

The proposed Mineral Processing Combining District would specifically allow heavy industrial/manufacturing uses on land designated in the General Plan as "RL-Range Lands" with an R-L zoning designation. Currently, such uses are prohibited on parcels with a Range Land general plan and zoning designation. Extractive and processing uses are allowed with a special use permit, but not industrial or manufacturing uses. Nonetheless, the 9-3 RDEIR suggests that changing the County's Zoning Code to allow these heavy industrial/ manufacturing uses should be determined to consistent with the present General Plan "RL-Range Lands" land use designation because it appears that such uses are "related to and compatible with" processing and development of natural resources. Such an interpretation of the General Plan is illogical for many reasons, several of which are discussed herein.

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First, the RDEIR's suggestion that "processing of aggregate to prepare asphalt appears to be a use that is compatible with 'processing and development of natural resources'" ignores the full text of the land use description and fails to acknowledge that the proposed ordinance would allow for the **manufacturing** of asphalt and concrete. The full text of the general uses permitted in the **Land Use Category: RL-Range Lands** in the General Plan provides:

General Uses: Residential uses, agricultural uses, forestry, cottage industries, residential clustering, uses determined to be related to and compatible with <u>ranching, conservation</u>, processing and development of natural resources, <u>recreation</u>, <u>utility installations</u>.

(Mendocino County General Plan, Policy DE-17 (emphasis added).)

If the full text of the provision is read in context for a proposed use to be consistent with the General Plan, Policy DE-17, it would also need to be related to and compatible with ranching, conservation, recreation, and utility installations, not just the processing and development of natural resources. This makes sense. Otherwise, industrial and manufacturing uses including but not limited to uses such as oil refineries, geothermal plants, concrete manufacturing, and textile mills could be consistent with a General Plan land use designation of Range Lands. For example, an oil refinery could be related to and compatible with oil and gas development and consistent with the General Plan land use. In fact, the project currently proposes to amend Section 20.036.010 of the Zoning Code, which specifically references "oil and gas drilling rigs," as discussed on page 4 herein.

Moreover, the RDEIR's proposed interpretation is clearly inconsistent with the intent behind the **RL-Range Lands** land use designation as specified in the General Plan:

Intent: The Range Lands classification is intended to be applied to lands which are suited for and are appropriately retained- for the grazing of livestock. The classification should include land eligible for incorporation into Type II agricultural preserves, other lands generally in range use, intermixed smaller parcels and other contiguous lands, the inclusion of which is necessary for the protection and efficient management of range lands. The **policy of the County and the intent of this classification shall be to protect these lands from the pressures of development and preserve them for future use as designated**.

(Mendocino County General Plan, Policy DE-17 (emphasis added).)

Furthermore, the RDEIR proposed interpretation would apply equally to all lands with an agricultural and forestry land use designation as the exact same language exists in the

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General Plan descriptions for all three land use designations. The General Plan provides in relevant part:

Land Use Category: AG-Agricultural Lands.

General Uses: Residential uses, farmworker housing, agricultural uses, processing and sale of agricultural products, cottage industries, residential clustering, uses determined to be related to and compatible with agriculture, conservation, processing and development of natural resources, utility installations.

(Mendocino County General Plan, Policy DE-16 (emphasis added).)

Land Use Category: FL-Forest Lands.

General Uses: Residential uses, forestry, timber processing, agricultural uses, cottage industries, residential clustering, uses determined to be related to and compatible with forestry, conservation, processing, and development of natural resources, recreation, utility installations.

(Mendocino County General Plan, Policy DE-18 (emphasis added).)

Therefore, based on the RDEIR's proposed consistency analysis, oil refineries, geothermal plants, concrete manufacturing, textile mills and other manufacturing related development of natural resources (e.g. oil, natural gas, geothermal, minerals, heavy metals, plant and animal products) could be consistent with a General Plan land use designations of Agricultural, Forest and Range Lands. Again, this would mean that under the County General Plan heavy industrial and manufacturing uses could be permitted on more than 90% of the private property in the County.

Second, it is undisputed that asphalt and concrete batch plants are manufacturing uses, not essential mineral processing uses and therefore are not permitted under the current and proposed definition of mining and processing uses in the Zoning Code. (Mendocino County Inland Zoning Code, § 20.036.010.) The Zoning Code specifically includes asphalt and concrete batch plants as "general industrial" uses. (Mendocino County Inland Zoning Code, § 20.028.015.) The proposed changes to Section 20.036.010 of the Zoning Code does not change this result, which will still only permit "essential processing" in relation to mining and processing uses:

The mining and processing use type refers to places or plants primarily devoted to surface or subsurface mining of metallic and nonmetallic materials, geothermal development, oil or gas together with *essential processing* of only nonmetallic mineral products. Except where conducted within a Mineral Processing

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> Combining District, and subject to the requirement for a major use permit, all such processing shall be of a temporary nature and carried on in conjunction with, and only for the duration of a specific construction project (except that portable screening and crushing equipment need not be related to a specific construction project). The sale of additional materials may he allowed for other off-site uses where such materials do not exceed ten percent (10%) of that volume specified for the primary construction project. **Typical places or uses include** borrow pits, gravel bars, rock quarries, **oil and gas drilling rigs**, or portable crushing, screening, washing, **and mixing plants**. (Ord. No. 3639 (part), adopted 1987)

(RDEIR, Appendix A (emphasis added).)

Thus even with the proposed change to Section 20.036.010, the Zoning Code would be internally inconsistent if asphalt or concrete plants were permitted on parcels with Range Land zoning as they are not essential processing and could be carried out on other property with the appropriate industrial land use designation and zoning.

Third, the RDEIR acknowledges the Mineral Processing Combining District is inconsistent with numerous General Plan policies including DE-1, DE-57, DE-85, RM-42, RM-47, and RM-128. (RDEIR, pp. 349-355.) Moreover, the RDEIR consistency determination regarding other General Plan policies is incomplete and/or irrational. Notably, the RDEIR only evaluates the proposed zoning change as it relates to the Project property and fails to evaluate whether the Mineral Processing Combining District would be inconsistent on other Rangeland designated properties in the County with mineral resources. In addition, the proposed Mineral Processing Combining District would allow concrete batch plants, but the RDEIR fails to consider any potential impacts from this change for proposed project or at a programmatic level. If the County doesn't believe that such a use is foreseeable as part of the proposed project or at any other property within the County why is the County proposing to change the Zoning Code for this purpose? The California Environmental Quality Act ("CEQA") does not allow the County to avoid analyzing any potential impacts associated with changing its Zoning Code to allow concrete plants in Rangeland zoned properties by labeling any such proposed uses as too speculative to evaluate. Simply put, CEQA requires a programmatic analysis of the proposed change.

Finally, if the County determined no other properties would likely use the Combining District zoning as stated in the RDEIR, then changing the land use designation for the Project property would be more appropriate rather than amending the County's Zoning Code to include the proposed Mineral Processing Combining District. That said, it is a reasonably foreseeable event that there are quarry sites that could request a heavy industrial mineral processing zone overlay. Therefore this likely event should be evaluated in a recirculated RDEIR if the County believes the proposed Mineral Processing Combining District should be adopted. As discussed above, this proposed heavy industrial use zoning for resource lands involves the entire county. The Zoning Code already allows two feasible options: heavy

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industrial zoning sites (in fact the applicant has a Shell Lane location in Willits for their current cement plant operations), and project specific mineral processing (e.g. asphalt and cement) is allowed on a temporary basis adjacent to a project (like the proposed Willits Bypass).

In conclusion, the RDEIR does not appear to indicate that the applicant has requested a General Plan amendment. Without such an amendment, we fail to see how the County can approve the project. As noted in my comment letter on behalf of Keep The Code dated July 20, 2011 regarding the RDEIR for the Project, while generally supportive of the current quarry operation, Keep The Code objects to the project's proposed significant adverse environmental impacts that will result from the proposed Mineral Processing Combining District. Therefore, we request the Board consider and reject the proposed Mineral Processing Combining District prior to the applicant completing an EIR or environmental review under the CEQA. (See Las Lomas Land Co., LLC v. City of Los Angeles (2009) 177 Cal. App. 4th 837 [Holding there is no mandatory duty under the CEQA to complete and consider an EIR before rejecting a project. If an agency at any time decides not to proceed with a project, CEQA is inapplicable from that time forward.].) Considering this issue now would potentially save the applicant, the County and the public from wasting time and resources; and would provide the Board with an opportunity to give updated direction to the applicant and staff what project should be considered at this time. As noted above the quarry operation does not need a new zoning designation. The proposed new Mineral Processing Combining District should be decided on its own merits as a "stand alone" issue.

* * *

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<u>Response to Second Letter from Howard Wilkins III (Remy Thomas Moose & Manly LLP)</u>

- 9-1. The comment is inaccurate. The RDEIR does provide a programmatic discussion of the potential range of impacts that could result from approval of amending the Zoning Code. See pages 338 through 343 of the RDEIR.
- 9-2. The comment is inaccurate. The proposed zoning would allow asphalt and/or concrete facilities with a Use Permit only at permitted quarries to allow processing of material from those quarries. It would not allow processing facilities in Range Lands that did not have a permitted quarry.
- 9-3. The commenter is correct that the EIR preparers did not find that such uses would be inconsistent with the Range Land use classification as described in the General Plan since it appears that an asphalt plant that processed aggregate produced at the adjacent quarry could be viewed "as related to and compatible with" processing of natural resources. The commenter disagrees and presents data to support his claim. It is not the role of the EIR to make the final consistency finding. As described in previous responses on this same issue, including from the commenter (Responses 8-54 to 8-59), the County Board of Supervisors will determine project consistency with the General Plan. The County Department of Planning and Building Services did not require a General Plan Amendment because the Department did not find the proposal inconsistent with the General Plan.
- 9-4. The EIR preparers believe the commenter has incorrectly interpreted the cited text. The general types of land use allowed include processing and development of natural resources. The cited section states that general issues include "uses determined to be related to and compatible with ranching, conservation, processing and development of natural resources, recreation, utility installations." This appears to mean that other uses that could be compatible with the listed uses may be allowed. It does not state that each of these listed uses must be compatible with each other use, as frequently they are not (e.g., development of natural resources and conservation, or recreation and utility installation).

As the DEIR states, consistency with the General Plan and zoning are a legal issue that will be determined by the County Board of Supervisors. The DEIR provides an analysis of potential consistency, but it is the County who will make the final determination of consistency with the General Plan.

GRASSETTI ENVIRONMENTAL CONSULTING

Howard Wilkins Remy, Thomas, Moose & Manley 455 Capitol Mall, Suite 210 Sacramento, CA 95814

July 20, 2011

Subject: Comments on the Revised Draft Environmental Impact Report for the Harris Quarry Use Permit Project

Dear Mr. Wilkins;

As you know, Grassetti Environmental Consulting (GECo) has been retained by a coalition of Mendocino County citizens (Keep The Code) to review the Revised Draft Environmental Impact Report (RDEIR) and relevant background documentation for the Harris Quarry Use Permit Project (the Project) with respect to technical adequacy and compliance with California Environmental Quality Act (CEQA) requirements. We previously submitted comments to Mendocino County regarding the 2008 DEIR for this Project, which we understand will be part of the administrative record for this RDEIR. This letter presents the results of our review of the RDEIR.

Our review indicates that the RDEIR has substantial deficiencies as summarized below:

Inappropriate Project Objectives

The Project objectives have been provided by the applicant and apparently not vetted by 10-1 the County. CEQA (Guidelines Section 15124) requires that the lead agency, as the entity responsible for implementing the CEQA process, vet the Project objectives for compliance with CEQA. One of the primary concerns with Project objectives is that they not be so restrictively construed so as to preclude meaningful consideration of alternatives. The Project objectives listed on pp. 64 and 65 of the RDEIR are too narrowly defined to allow adequate and meaningful consideration of alternatives. As 10-2 defined, these objectives would limit acceptable alternatives that meet all of the Project's objectives to the Project itself, which would be an impermissibly narrow range. In 10-3addition, the "Objectives" include argument for the economic benefits of the Project that is entirely inappropriate for this section. Similarly, this section includes a litany of unsupported argument regarding "benefits" of the Project that have no relationship to the proposed objectives. The County should broaden the Project objectives such that other 10-4 alternatives are feasible. In addition, the applicant's argument discussion is deleted. We suggest replacing the current Project objectives with something along the lines of the following:

1) Provide a long-term source of aggregate to inland areas of Mendocino County in the Ukiah-to-Willits region.

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July 20, 2011
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- 2) Locate the quarry so as to minimize environmental impacts, including visual quality, air quality, traffic, health risks, hydrology, and cultural resources.
- 3) Provide adequate asphalt facilities to serve these regions, located so as to minimize the facility's environmental impacts.

To the extent that the Project Objectives are tied to a regional need for aggregate products 10-5and/or economic benefits associated with that need, a factual discussion and supported analysis of the need for the Project should be included in the Project Objectives. Any such discussion must include consideration of the pending application for aggregate processing facilities, including an asphalt batch plant, at the Longvale site on Covelo Road by Grist Creek Aggregates. As well as the failure of the Willits Bypass Project to gain the U.S. Army Corps of Engineers 404 permit, which has resulted in the delay, if not loss, of State funding (discussed further below). Given those two factors, is there a need 10-6 for this Project in the County. If there's no need, then it is unclear that the County can find Overriding Considerations that are required for Project approval.

Feasible alternatives should be reevaluated in light of these revised CEQA-compliant objectives and updated supply/demand conditions.

Inappropriate Consideration of Proposed Willits Bypass

All references to the Willits Bypass Project should clearly state that the Bypass Project 10-7has an impasse with the U.S. Army Corps of Engineers regarding the 404 permit and consequently the California Transportation Commission in November 2010 deferred approval of funding for the Bypass Project until February 2012. Therefore the Willits Bypass Project is "speculative", as defined by CEQA Guidelines. Please note that, in determining environmental effects of a project or alternative, only reasonably foreseeable impacts should be addressed. "A change that is speculative or unlikely to occur is not reasonably foreseeable." (CEQA Guidelines, Section 15064(d)(3)).

Interestingly, the RDEIR acknowledges the speculative nature of the Willits Bypass on p. 80, when discussing the asphalt facility, stating, "Since government budgeting and spending largely determines the material demand, estimating the long-term demands becomes speculative." Given that government funding decision on the Willits Bypass has been deferred, assuming that the Harris Quarry Use Permit Project materials would be used locally by the Bypass Project also seems speculative.

Therefore the Willits Bypass should not be considered in determining impacts of either the project or alternatives. As described below, the air quality analyses of each of the alternatives must be reevaluated and corrected to address this factual condition.

Failure to Adequately Evaluate Alternatives

In addition to the problems associated with the inappropriately restrictive Project purpose 10-8and need, we have noted the following general issues in the document's assessment of alternatives:

The RDEIR claims, and its alternatives analyses assume, that alternatives would ٠ have secondary effects of requiring expansions at other quarries. Given that the

Willits Bypass Project appears to be deferred at best, any assumption of substantially increased aggregate demand is speculative and factually unsupported. In addition, the proposed Grist Creek sand and gravel mine, as well as the recently approve Kunzler Terrace Mine, should require reevaluation of the supply side of this equation.

The Project and Alternatives air quality analyses all assume that the materials from the Project would be used locally, presumably primarily in the unpermitted and unfunded Willits Bypass Project. This assumption erroneously skews the impact assessments as follows:

- The RDEIR assumes "benefits" of the Project over the alternatives in terms of air quality that are completely dependent on the vast majority of the Project's aggregate and asphalt products being used in the Willits Bypass. These "benefits" are then converted to adverse air quality impacts of the various alternatives when compared to the Project.
- Given the status of the Willits Bypass Project, and the limited local demand for aggregate absent the Bypass Project, the Project and Alternatives analyses should be reevaluated using the more likely assumption that much of the material would be hauled to more distant locales.
- If the Bypass were to be eventually constructed, there is no guarantee that the proposed Project would receive the contract to supply needed aggregate or asphalt over the three to four year construction period. It is quite possible that such demand may be met from a lower cost but more distant existing quarry, resulting in the need to export Harris Quarry rock and asphalt outside of the local area. The Project and Alternative VMT and air quality analyses should be augmented to address this possibility.
- Alternatives should be reevaluated in light of the potential export of materials from the area resulting from the tripling of average annual mined materials compared with existing conditions.
- Comparison of alternatives should be reevaluated in light of the need to revise 10-12 Project objectives.

More specifically, nearly all of the Alternatives air pollution "analyses" state that emissions from the alternatives would be substantially greater than with the Project. This seems to rely on assumptions of local demand, the major portion of which would be generated by the Willits Bypass. Absent that Project, there is no evidence provided in the RDEIR that the alternatives would have a greater air quality impact than the Project. This "analysis" relies on speculative consideration of indirect impacts associated with a reduced or eliminated Project. In addition, the RDEIR is often vague with respect to what it is actually comparing; for example, on p. 362, the RDEIR states, "As shown on Figure 5.2-1, the increased [project] production...will result in a reduction in VMT because the Harris Quarry is closer to major population centers...". It does not say what

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this reduction would occur with reference to. Certainly not existing conditions. Probably not compared to continued operation of the quarry at 75,000 cy/year. There's zero factual evidence provided to support this repeated assertion of reduced VMT in the RDEIR. It appears to rely on a series of assumptions, presumably including the speculative Willits Bypass.

Further, the RDEIR fails to provide evidence that there will be sufficient long-term aggregate product demand within the Highway 101 corridor of Mendocino County to support the increase in supply that would be provided by the proposed Project, Grist Creek Aggregate project, Kunzler Terrace Mine, and other pending supplies. Even if the Willits Bypass were to go forward, it would only constitute a 3 to 5-year increase in regional aggregate demand. However, the EIR assumes local demand (and therefore reduced VMT) for the entire life of the project. Absent any evidence of long-term demand for cumulative production of the Project and other approved and proposed facilities in the local area, the RDEIR should evaluate the likelihood (and potential impact to VMT) of the excess production of aggregate products (over local demand) being transported south to the larger demand centers in Sonoma County. Alternately, development of the Project could cause a shift in transport from the other quarries currently serving the area to more distant markets, thereby just shifting VMTs rather than actually reducing them. Would this total VMT exceed existing VMTs and/or VMTs of the reduced-production alternatives? Would emissions of air pollutants and greenhouse gases of the Project then exceed those of the reduced-production alternatives? Please reevaluate these issues in light of realistic worst-case scenarios rather than using the CEQA-impermissible best-case scenario.

Similarly, on p. 371 (Alternative 3), the RDEIR speculates that "regional emissions of pollutants and greenhouse gases would be worse because of the increased VMT and since the Project includes a contemporary asphalt facility with more air quality controls than older facilities in the region." Again, this is an unsupported assertion that fails to include any factual evaluation of asphalt facilities or consideration that, if there is, in fact, substantial additional demand, new facilities might be built at other quarries in the area. Further, it repeats the unsupported assumption regarding VMTs addressed earlier in this letter.

Unsupported assumptions are inappropriate for an RDEIR analysis. The RDEIR should 10-18 be revised to either provide factual evidence supporting its assumptions or state that the alternatives that have no- or reduced- operations would reduce air pollution compared with the proposed Project. Further, the RDEIR should consider that, if the Harris Quarry 10-19 were to expand as proposed, other regional quarries currently serving the Willits-Ukiah areas may have to truck their material farther to market, potentially offsetting any regional air quality benefits attributable to the Project.

Several of the Alternatives have been artificially manipulated to increase their relative impacts in other ways. Most extreme is the arbitrary removal of the deceleration lanes and acceleration lane from the reduced-project and no-asphalt plant alternatives (see, for example Alternatives 3 and 6). Given that the RDEIR traffic analysis says that those

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facilities are "warranted" under current conditions, then it is entirely inappropriate to eliminate then from those alternatives. Please revise those alternatives to include all "warranted" lane reconfigurations on US 101.

The evaluations of each of the alternatives' compliance with Project objectives should be 10-21 re-evaluated once those objectives have been revised to be CEQA compliant.

Project Description Issues

The RDEIR (p. 65) states, "County records indicate that actual quarry extraction... Yet the previous DEIR indicated an averaged ... approximately 75,000 cu. yds." extraction rate of around 180,000 cu. yds¹. What has been the peak annual extraction rate in the past 5 years? CEQA requires that baseline conditions be those conditions in effect at the time of RDEIR preparation (Sunnyvale West v. City of Sunnyvale, December 2010). Therefore the 2010 quarrying rate at the existing quarry should be used as the baseline.

The RDEIR (p. 65) also states that the one-time exception annual permitted production from the existing facility is 125,000 cu. yds., yet a few pages earlier the RDEIR tells us that the one-time exception expired in 1995. If so, why is it referenced as an "existing operation"? The RDEIR should identify the peak annual extraction rate in the past 5 years? CEQA requires that baseline conditions be those conditions in effect at the time of EIR preparation (Sunnyvale West v. City of Sunnyvale, December 2010). Therefore the 2010 quarrying rate or an average of the past few years should be used as the baseline.

The discussion of trucking on p. 172 is unclear. How many daily truck trips would occur, 10-23on average, on a summer day with and without the Project? How can a tripling of daily extraction result in "Truck volumes during normal operation periods ... remain[ing] similar to the current quarry levels", with only a few "peak day" exceptions (RDEIR p. 72)? It seems infeasible to triple the extraction rates while only increasing "normal operations" hourly trips from 5-6 currently to 8 trips with the Project. Please explain.

Table 3-2 shows aggregate processing rates increasing from current rates of 200-250 10-24 tons/hour to post-project rates of 300-400 tons/hour. Again, this seems inconsistent with both the tripling of annual extraction rates and the minimal truck traffic increases discussed above.

Inadequate Treatment of Countywide Zoning Change

The document asserts that current owners of other quarries have no intent to develop asphalt/concrete plants at their sites, and therefore the Project would have less-thansignificant growth-inducing impacts (RDEIR p. 17). However other active quarries could easily be sold and, because the zoning runs with the land, not the owner, the Project's Countywide zoning change could lead to development of materials processing facilities at other quarry sites in the County. Therefore, the RDEIR should include a basic

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¹ The RDEIR's traffic consultant (Kruger, January 28, 2008), identified rates of quarrying over a 5-day work-week over a year resulting in a total existing quarrying of 187,500 cy/year, far in excess of permitted quantities. An average of 6 trucks/hour over a 10-hour day, 5 days/week, at the RDEIR's assumed truck capacity of 15 cy/truck equals approximately 181,000 cy of quarrying annually.

environmental impact assessment of possible materials processing facilities at these sites. In addition, the RDEIR should note that materials processing impacts associated with other future facilities may occur as a result of the proposed zoning change. This affects the adequacy of the cumulative impacts and growth-inducing impacts sections, as well as the general impacts discussion.

Unsupported Transportation Assumptions

The Traffic analysis conclusions that the Project would reduce traffic compared with existing conditions are unsupported, particularly given the tripling of production at the quarry, the unaccounted-for need to import substantial quantities of rock material for use in the manufacturing of asphalt and concrete, and traffic associated with the proposed asphalt plant and asphalt crushing/recycling.

Absent any evidence, the RDEIR assumes that all of the Project's materials would be used locally, near the site, and not exported. It is unclear how a tripled production would all be used locally, especially given that the Willits Bypass is speculative, at best.

Inaccurate Setting/Baseline Assumptions Used for Comparison with Future Impacts

The RDEIR's air quality assessment states, "Reduction in VMT will result in overall net reduction in greenhouse gases in the County from transportation sources" (RDEIR p. 297). This uses the wrong baseline. As discussed previously, CEQA requires a baseline of existing conditions. A tripling of mining and trucking operations compared to existing conditions would increase, not decrease, emissions. Please revise and reconsider the significance of this impact.

Other Issues

- The Project would increase nighttime quarrying from fewer than 20 days per year to up to 100 nights/year, yet the RDEIR finds no significant increased noise impact from night-time operations. The current decibel level of noise from the quarry during the night is zero. With up to 100 nights of operations the decibel levels would be expected to increase significantly from the baseline. This potential significant impact should be reevaluated, including analysis of repeated single-event noise impacts.
- Some mitigation measures appear to include deferred studies that are inappropriate in CEQA documents, in some cases, confuse monitoring with actually mitigating.
- The RDEIR traffic section should evaluate increased road wear as a result of the 10-30 Project.
- The RDEIR noise analysis is based on County noise standards as a threshold of significance. This threshold may or may not be adequate (see Berkeley Keep Jets Over the Bay v. Board of Port Commissioners decision). Please provide evidence that those thresholds have been effective in eliminating actual noise impacts (evidenced by complaints) on nearby sensitive receptors.

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The net effect of all of the above-referenced issues is a RDEIR that fails to adequately identify the Project purpose and need and certain impacts. Equally problematic, the RDEIR presents a skewed assessment of the relative impacts of alternatives, particularly with respect to air quality. This document therefore fails to serve its CEQA-mandated purposes of informing the public and decision-makers of the actual impacts of the Project, fairly evaluating alternatives in light of the Project, and proposing mitigation for significant impacts. As such, it should be revised and recirculated for public review.

We look forward to working with the Keep The Code to assure that the RDEIR meets all CEQA requirements. Please feel free to contact me at (510) 849-2354 if you have questions or comments on this letter.

Sincerely;

Mikel Dunk

Richard Grassetti Principal Grassetti Environmental Consulting

Response to Letter from Richard Grassetti (Grassetti Environmental Consulting)

- 10-1. The comment is incorrect. It is standard for the project applicant to provide what the applicant's objectives are in proposing the project. The County is not proposing this project, and, therefore, does not have any objectives regarding the project. The County accepted these objectives as part of the project application. More importantly, regardless of the commenter's opinion about what the objectives should be, the objectives did not limit what alternatives were addressed in the RDEIR. The RDEIR assesses the proposed project plus seven project alternatives, which is more than are included in most EIRs.
- 10-2. The comment is inaccurate. The CEQA Guidelines do not state that the only project alternative that can be approved is one that meets all the applicant's objectives. We refer the commenter to CEQA Guidelines Section 15126(b) wherein it states that the purpose of the alternatives analysis is to identify alternatives that avoid or substantially reduce the project's significant effects even if it would impede the attainment of the project objectives.
- 10-3. Again, the objectives are provided by the project applicant they are not County objectives as the County is not the applicant. The CEQA Guidelines do not limit what the applicant can include as his/her objectives. More to the point, the commenter does not show how this expression of the applicant's objectives has any bearing on the EIR analysis. The revision of the applicant's objectives are not required to address any impact, mitigation, or project alternative. As such, no revision of the RDEIR is required.
- 10-4. The commenter's opinion about what the applicant's objectives should be are noted for the record. The commenter's objectives are more suitable for a County general plan or area plan where the County is attempting to identify locations that should be zoned for certain uses. This RDEIR is on a specific project proposal on a specific site. It is not a planning exercise in identifying the ideal location for specific types of land use. The commenter does not give an example in this comment about how such general objectives would result in new project alternatives not assessed in the RDEIR. As such, no revisions of the objectives or RDEIR are needed.
- 10-5. The commenter assumes that the RDEIR assesses the project and/or alternatives based on the applicant's statement that the project meets a regional need for aggregate. It does not. The RDEIR assesses the environmental impacts of the proposed project. It assesses project alternatives to determine to what level they reduce the project's potentially significant impacts. The actual future need for aggregate and how it could be supplied is not an issue for the RDEIR. The CEQA Guidelines do not require the RDEIR to analyze the need for a product that an applicant proposes to provide. As such, no revision of the RDEIR is needed. In addition, regarding the need for the products, the commenter is referred to Comment Letter 5 from the County Department of Transportation, which states that the aggregate and asphalt from the project are needed local commodities.

10-6. Again, the RDEIR is not required to show there is a need for what the project proposes to produce. The commenter incorrectly identifies the "need" for the project's products as the only factor the County could consider if it approves the project and needs to adopt a Statement of Overriding Considerations. There are a number of factors that CEQA Guidelines Section 15093(a) states are to be considered, namely *CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determine whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."*

Again, the commenter has not provided any suggestions regarding what additional alternatives should be assessed, so no revision of the RDEIR is required.

10-7. This comment is inaccurate. According to Phil Dow, the Director of the Mendocino Council of Governments, Phase 1 of the Willits Bypass project has been fully programmed as a project by the State and \$164 million have been allocated to construct Phase 1. The project has been delayed as the Army Corps needs to approve a 404 Permit, but the permitting process is proceeding. MCOG expects the project and all approvals will be complete by February 2012 with the project being funded by July and construction beginning in the autumn of 2012.⁶ This bypass project is a reasonably foreseeable project as stated in the RDEIR. The County, recognizing this, required the RDEIR to contain traffic analyses for various timelines with and without the bypass to ensure a full analysis in the case that the project was not built, but it currently remains scheduled for construction. Given that the bypass remains a reasonably foreseeable project, no revision of the RDEIR regarding this project is required.

The County specifically directed the RDEIR preparers to include traffic analyses with and without the Willits Bypass (see page 215 of the RDEIR). Traffic impacts were identified for scenarios that included or excluded the bypass. The traffic work done for the project alternatives to show vehicle miles traveled did not assume demand from the Willits Bypass (see Response 11-7 regarding the VMT analysis).

10-8. As described in Response 10-7 above, the analysis of alternatives including the Willits Bypass remains accurate and is not speculative. The Kunzler Terrace Mine was included in the alternative traffic analysis (see Table 5.2-1). Also, see the revision to that Table included in Response 11-7. The Grist Creek project (also known as the Longvale site) on Highway 162 was not a foreseeable project at the time the RDEIR was prepared. It is currently an incomplete application that seeks to resume aggregate processing on that site. The application does not list what facilities or equipment would be included, but the previous use

⁶ Phil Dow. Personal communication, 9/28/11.

permit for the site included an asphalt facility and a concrete plant. Though the application has been submitted, the County has requested additional information from the applicant, and that information has not yet been supplied. Once the application is accepted as complete, a CEQA analysis will be conducted prior to the County considering the merits of the project.

Though not required, an analysis was performed by Wtrans and peer reviewed by the EIR traffic engineer to determine the resulting VMT if the Harris Quarry asphalt plant were replaced with one having an equal production capacity at the Longvale site. The Longvale site is located approximately 10 miles north of the City of Willits on SR 162 and approximately two miles easterly of US 101. The VMT associated with providing asphalt to Mendocino County with a plant located at the Harris Quarry site is projected to be 648,120 miles traveled annually. The same sized plant located at the Longvale site would result in 659,718 miles traveled annually to provide asphalt to Mendocino County, or an increase of 11,598 miles annually. Table 1 summarizes the trips and vehicle miles traveled from the various asphalt plants with and without the Harris and Longvale plants. The Longvale site is located further from the principal centers of population than the Harris Quarry site and would therefore be expected to result in longer trips to provide asphalt and higher VMT. VMT calculations are provided in Enclosure A of Comment Letter 15 below.

Asphalt Plant	Base		Harri	s Plant	Longvale Plant			
	Trips	VMT	Trips	VMT	Trips	VMT		
Harris	0	0	2,644	85,621	0	0		
Ford Gravel	7,499	284,767	5,444	183,063	5,420	176,041		
Ten Mile	1,718	71,146	1,815	61,089	1,808	66,720		
Syar Healdsburg	2,501	445,239	1,816	318,347	I,805	295,720		
Longvale	0	0	0	0	2,721	121,238		
Total	11,718	801,152	11,719	648,120	11,754	659,718		

Table IVehicle Miles Traveled Comparison

It should be noted that the VMT calculations for asphalt do not include trips to haul aggregate to the asphalt plants. See Response 11-7 for more information on VMT. The haul trips made from quarries to asphalt plants are considered to be included in the VMT calculations for aggregates. It is also logical to conclude that asphalt plants located at or near quarry sites that provide raw materials will result in shorter haul trips and contribute less to overall VMT.

10-9. The comment is incorrect that the RDEIR states that products produced by the project would primarily be used for constructing the Willits Bypass. The products would be used throughout the central portion (and perhaps further) of the County. It is to be noted that the proposed project is not for a temporary asphalt facility just to meet the demand of the Willits Bypass. Based on the analysis of VMT for the project and the alternatives, the RDEIR correctly concluded that the project

would have fewer air quality impacts than five of the project alternatives. There was no attempt to "skew" information since the EIR preparers have no stake in whether the project is approved or not. The comparison of the alternatives does note that among the disadvantages of several of the alternatives would be the increase in VMT with corresponding air quality ramifications. However, the RDEIR did not identify these effects as a new impact of the alternatives or an impact that increased sufficiently to become a significant and unavoidable adverse impact not already identified for the proposed project.

The analysis of traffic and air quality effects of the project alternatives was done per County specifications and based on what remains likely consumers of aggregate and asphalt. No revision of the alternatives analysis of the RDEIR is required.

In these first nine comments and subsequent comments, the commenter is suggesting that the alternatives analysis was skewed to make the project look like the only or best alternative. He states that the analysis of the alternatives as regards traffic and air quality should be redone because the Willits Bypass may not be built, there is currently a lower demand for aggregate and asphalt, and/or that the Willits Bypass might be served by a more distant source. The commenter overlooks that on page 388, the RDEIR concludes that of the seven feasible alternatives, the RDEIR rates the Project as Proposed as the least environmentally superior. This would remain the RDEIR conclusion even if we concurred (which we do not – see the following two responses) with the commenter's suggestions.

- 10-10. See Responses 10-7 to 10-9 regarding the status of the Willits Bypass in the environmental analysis. The VMT analysis does not include meeting the demand from constructing the Willits Bypass. See Response 11-7 for more information on VMT. Regarding reduced general demand, again, the commenter confuses the responsibility of the RDEIR. The RDEIR assesses a project's impacts on the environment not whether there is a consumer demand for what the applicant proposes to produce. In the same manner, the demand for the products does not affect the analysis nor the comparison of project alternatives. While the need for the project may be considered by the County when determining the merits of the project, it is not the EIR's responsibility to identify or quantify that demand. As such, no revision of the RDEIR is required.
- 10-11. See Response 10-7 about how the RDEIR assessed traffic impacts with and without the Willits Bypass and Response 10-9 regarding predicted markets for the products. It is possible as the commenter states that another asphalt plant and/or quarry could supply all or most of the demand for the bypass. However, it is unlikely that more distant sources would be less expensive. In any case, the VMT analysis did not include demand from the Willits Bypass because it is a short-term project.
- 10-12. See earlier Responses 10-3 and 10-4 regarding the commenter's concern about the project objectives. As noted previously, the objectives did not drive the identification of alternatives nor their environmental ranking. The commenter has

not suggested a new alternative other than the idea that perhaps the material for the Willits Bypass would be supplied by some out-of-County source. This is not an alternative to the project; it is simply a possibility that could affect the project's profitability.

- 10-13. The comment is inaccurate. The RDEIR analysis of air quality impacts for the alternatives does not state that air quality impacts would be increased "significantly." It does say they would be increased for five of the alternatives but not "significantly." The comment is also incorrect in stating that the analysis was based on speculation. As noted above in Responses 10-7 to 10-9, the analysis is based on countywide demand from customers, but not for the Willits Bypass. The commenter has not provided any information that there will not be an ongoing demand for aggregate and asphalt in the County, regardless of when the Willits Bypass is built. The project's central location would be expected to reduce the VMT, especially for asphalt, given that, as the County Department of Transportation notes they frequently need to purchase asphalt from out-of-County sources. See Response 11-7 for more information on VMT. On these bases, the analysis and conclusions regarding increased VMT for five of the project alternatives remain accurate, and no revision of the RDEIR is required.
- 10-14. As discussed on page 381 of the RDEIR, the alternative that includes the existing production limits for the quarry (Alternative 6) would possibly increase VMT because the demand for aggregate would need to be supplied by more distant sources for the Willits area and north and for asphalt for much of the County (as this is frequently supplied by out-of-County sources). If the commenter is making the point that Alternative 6 is superior to the project as proposed, this is the same conclusion reached in the RDEIR (see page 388 where this alternative is identified as the environmentally superior alternative of all alternatives that are not a "no project" alternative).
- 10-15. As noted in previous comments on this same subject, it is not the role of the EIR to identify future aggregate or asphalt demand and whether it can be met by other sources. The reduction in VMT over the long term is due to the centralized location of the site and the reduced need to import asphalt from out-of-County sources. See Response 11-7 for more information on VMT.
- 10-16. It would be quite speculative to think that aggregate or asphalt from the project would be directed to the main population centers in the area in Sonoma County as there are supplies of both aggregate and asphalt that are much nearer those centers than the project site, and the materials would be less expensive from those nearer businesses. It is also speculative that there would be any substantial demand to Lake, Trinity, or Humboldt that could not be met by nearer sources. There is no evidence to indicate that any substantial quantities of materials from the project would be shipped out of the County. In fact, imports from out of the County will continue. This speculative analysis is not needed for the RDEIR. As noted previously, even if the commenter's assumptions were used, it would not change the conclusions about or ranking of the project alternatives.

- 10-17. It is not an assumption that the existing asphalt plant north of Ukiah is an old plant lacking modern Best Available Control Techniques. The plant was installed in the 1950s. It is true that new asphalt facilities if they were built elsewhere would likely be required by the MCAQMD to have similar emission controls. However, such facilities are speculative at this point.
- 10-18. See Responses 10-15 to 10-17 regarding what the commenter terms unsupported assumptions. As the RDEIR states on page 364, it is possible that some of the assumptions used to develop the VMT comparison could be incorrect, however, there would remain some increase in the VMT for Alternatives 1, 2, 3, 4, and 6. See Response 11-7 for more information on VMT. One could develop a set of assumptions that might change this conclusion. If one assumed, as the commenter suggests, that 1) there is little demand for project-produced materials so they would be trucked out of County; and 2) asphalt could be produced at new asphalt facilities at other quarries in the County, one could possibly find that the project as proposed generated more VMT than the no project or reduced production alternatives. Such a scenario is very speculative and much less likely to reflect probable future conditions. More importantly, as noted in several previous comments, it would not change the conclusions regarding the environmentally superior alternative or the ranking of alternatives presented in the RDEIR.
- 10-19. The VMT analysis presented in Table 5.2-1 assumes travel from all quarries and asphalt facilities in the County to meet County demand. Also see previous Response 10-8. See Response 11-7 for more information on the assessment of VMT for the project alternatives analysis.
- 10-20. The point of a project alternatives analysis is to provide a range of alternatives to allow an understanding of the different levels of impact that would result from various configurations including alternatives that do not include the EIR-recommended US 101 improvements. As is stated in the RDEIR, Alternative 3 would substantially increase traffic safety impacts, and this was identified as a new significant and unavoidable impact for that alternative. It is possible, if not likely, that if the County approved this alternative it would require the highway improvements rather than add this impact to the other significant and unavoidable impacts. Alternative 6 maintains existing conditions. It does not increase traffic safety hazards and highway improvements are not needed to mitigate a project-generated impact. That said, the County is free to impose conditions to improve the highway when considering the merits of the proposed use permit renewal.
- 10-21. As stated in previous responses, the commenter has an incorrect understanding of the role of who is responsible for objectives, plus he has not presented any data that shows that the objectives included in the RDEIR affect any of the analyses in the RDEIR. No new analysis of alternatives is required.
- 10-22. The peak extraction rate within the past five years twice exceeded the 75,000 cubic yard volumes allowed for under the existing permit (with associated violation fines assessed by the County). If we had used the excessive figure

reported as the baseline, impacts would be less than reported in the RDEIR. The County chose to use the 5 year average (2006-2010) average, which was approximately the 75,000 cubic yard *in situ* maximum production level. This 75,000 cubic yard *in situ* production level was correctly used as the baseline for environmental review purposes.

- 10-23. See Response 11-3 to this same comment.
- 10-24. The increase in production rate is needed to meet peak demand and does not affect overall truck traffic generation. The RDEIR assesses truck trip generation for normal and peak days.
- 10-25. The requested list of the range of possible impacts that could be expected at other quarries is presented on pages 340 to 342 of the RDEIR. The RDEIR assesses the impacts on other quarries precisely because, as the commenter notes, the new zoning district would allow future processing at quarries meeting the proposed zoning district requirements.
- 10-26. The commenter is incorrect. Nowhere does the RDEIR state that the project would reduce truck traffic. If the commenter is referring to the VMT analysis in the project alternatives section, then he is correct that the project would reduce the vehicle miles travelled to provide customers in the County with aggregate and asphalt. While it may be somewhat counterintuitive, the project would increase truck traffic in and out of the site. However, because there is a finite demand for these materials, supplies from Harris Quarry would replace trips from more distant quarries and asphalt facilities. Therefore, the number of miles travelled in a year would be reduced. As noted in previous responses to this commenter, the VMT analysis in the project alternatives section does not include supplying the construction of the Willits Bypass. Please also see Responses 11-7 and 11-9 regarding the VMT issue.
- 10-27. Please see Response 10-26 above. The analysis of greenhouse gas on pages 294 to 297 did assess impacts on existing conditions. The project alternatives section assessed changes in VMT if the project was approved. Again, the project would reduce existing VMT due to its central location. In fact, the VMT analysis included in the assessment of alternatives is conservative in that it does not attempt to calculate the further decrease in VMT for the Harris Quarry project needing to haul aggregate less than a mile to the asphalt facility. Because it would reduce the current VMT, it would, as correctly stated in the RDEIR, reduce emission of greenhouse gases from haul trucks. This is different than the analysis of all greenhouse gas emissions presented on pages 294 to 297. The RDEIR does not state that the project would result in an overall decrease in GHG emissions. Please also see Responses 11-7 and 11-9 regarding the VMT issue.
- 10-28. The commenter provides no scientific support for his claim that the project would have a significant nighttime noise impact. The commenter is referred to pages 236 to 241 for an analysis of noise, including nighttime noise, impacts. The noise analysis was done by well-known and respected acoustic consultants and done consistent with guidelines for examining noise impacts, including potential

repeated single-event sources. The commenter is correct that by using the standard significance criteria for assessing noise impacts, the project would have a less-than-significant nighttime noise impact. The commenter has provided no data to show why this analysis is inadequate, and a new study is not warranted.

- 10-29. This is a general comment. The commenter is incorrect, but because he provides no examples, no additional response is possible. The RDEIR contains no recommendations for what are defined as "future studies."
- 10-30. A study on road wear was not requested by Caltrans, the County Department of Transportation, or any other agency or individual during the NOP review period or in the review of this RDEIR, the present comment being the one exception. There is no CEQA Guidelines criterion for road wear. Given that and the fact that responsible agencies concerned with roads did not require it, such a study is not warranted for this RDEIR. We would further note that because the project would reduce the VMT for aggregate and asphalt transport, it would reduce road wear on a countywide basis.
- 10-31. The County as Lead Agency approved the significance criteria used in the RDEIR. The commenter has not provided any data to show these criteria are inadequate. The RDEIR is not required to show the effect of the County adoption of these standards on other sensitive receptors spread throughout the County. On a countywide basis, these effects were addressed in the EIR certified for the new County General Plan.
- 10-32. We believe that the commenter is incorrect in his conclusions. As the previous responses have shown: 1) it is not the County's or EIR preparers' responsibility to provide project objectives; 2) the analysis of the alternatives and the effects on VMT and air quality are correct and not skewed; and 3) the commenter misses the point that even if his recommendations about how to identify objectives and assess alternatives were accurate, the conclusions of the EIR regarding the ranking of the alternatives would be exactly the same as listed in the RDEIR. The commenter has provided no grounds for additional analysis, and the RDEIR does not need to be recirculated.



Vision That Moves Your Community

Transportation Consultants

july 20, 201 i

Mr. Howard F. Wilkins III Remy, Thomas, Moose & Manley 455 Capitol Mall, Suite 210 Sacramento, CA 95814

Subject: Peer Review, Traffic and Circulation Element, Harris Quarry Revised DEIR

Dear Mr. Wilkins:

Keep the Code has contracted with TJKM Transportation Consultants to prepare a peer review of the Traffic and Circulation Element of the Harris Quarry Expansion Revised Draft Environmental Impact Report (DEIR). I have completed the review and have the following comments.

The section on existing traffic volumes on page 203 indicates that turn movement counts conducted in June 2006 are presented in Appendix C, but those count results are not included. Appendix C also fails to present the extrapolated turning movement volumes used in the intersection level of service (LOS) analyses. Without this missing data, the reader cannot confirm the accuracy of either the volume adjustments made to the June counts to reflect the peak months of July (for Highway 101) and October (for quarry production), or the extrapolation of traffic growth from year 2006 counts to analysis years 2010, 2014 and 2030, and thereby assess the reliability of the resulting LOS calculations.

Furthermore, the assumed straight-line extrapolation of traffic growth from year 2006 counts to year 2010 volumes, based on projected traffic growth of 50 percent over the 20-year period from 2006 to 2025, does not appear to provide an accurate representation of baseline conditions in effect at the time of EIR preparation (i.e. year 2010) for the study intersections on Highway 101. The assumed growth rate of 2.5 percent per year results in use of traffic volumes increased by 10 percent from year 2006 counts in the baseline year 2010 LOS analyses. However, a comparison of the annual "Traffic Volumes on the California State Highway System" provided by the Caltrans Traffic Data Branch (www.dot.ca.gov/hg/traffops/saferesr/trafdata/) indicates that Highway 101 volumes in the project vicinity almost certainly decreased between 2006 and 2010, consistent with prevailing economic conditions. The peak-month average daily traffic volume south of the closest Caltrans count location at the Willits south city limit (postmile 45.167) was 19,700 vehicles per day (vpd) in 2006 and 2007, but decreased to 15,800 vpd in 2008 and 15,400 vpd in 2009. Although the 2010 Caltrans traffic volumes were not available as of the preparation of this letter, only a modest increase, if any, from 2009 volumes would be expected based on prevailing economic conditions, and 2010 volumes were probably still significantly lower than 2006 levels, let alone the additional ten percent used in the LOS analysis. Note that no LOS analysis using the 2006 count data without adjustment is presented in the Revised DEIR. This is the case despite the footnote on page 203 regarding the 2006 counts, which states: "These counts remain suitable for the traffic analysis because there have been no substantive changes in quarry operations and no substantive new development in the area served by Black Bart Drive."

The various sections in the Revised DEIR describing Minimum Acceptable Standards are somewhat contradictory and very confusing to a reader attempting to determine the basis for a finding of a significant impact. For example, the section regarding Caltrans standards on page 206 states that "where operation is already below LOS C, the existing measure of effectiveness should be maintained. For public road intersections [e.g. at Black Bart Drive], this means that the existing

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TJKM Transportation Consultants

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control delay should be maintained. Under this criterion, any increase in delay would therefore result in a significant impact." The tables in Section 4.4 show the LOS and delay results for the Black Bart Drive and project driveway stop sign controlled approach to Highway 101. Comparing Table 4.4-2 with Table 4.4-8 for the 11:00 AM to Noon period shows operations already at LOS D with delay increasing from 25.5 to 27.6 seconds on Black Bart Drive, but no project impact is identified, which appears to be an oversight based on the Caltrans criterion as described. However, page 14 of Appendix C further elaborates the standards based on discussion with Caltrans staff, as follows: "...the standard is to be applied to the overall average intersection delay, not that associated with any single movement or approach." Unfortunately, such overall average intersection delay results are not presented in any tables in Section 4.4 or Appendix C. To further add to the confusion, page 14 of Appendix C also includes the following statement: "While Caltrans standards apply to the study intersection of US 101/Black Bart Drive, both the overall average intersection delay and the delay on the worst approach were considered to provide a conservative analysis." The conundrum resulting from this mix of statements makes it nearly impossible for even an experienced professional to discern the applicable criteria for a significant LOS impact.

The trip generation analysis for the Base Permit and Project scenarios presented in Section 4.4 does not support certain statements made in the Project Description Section 3.2 of the Revised DEIR. The project description text on page 72 describes "normal" operating periods and operations as 5-6 trucks per hour on a "normal day" for the current quarry, with 8 trucks per hour leaving the site anticipated with the project "on average during normal operations." No specific definition of "normal" operations or time periods is given to provide context for these asserted truck trip projections, which are not consistent with the other, much higher calculations of project truck trips used in the detailed traffic analysis. Without further definition, these assertions about "normal" operations are not meaningful, and potentially misleading to the reader in regard to the project's generation of additional truck traffic in the vicinity of the site.

Mitigation Measure 4.4-B.1 includes an acceleration lane for left turns departing from the project 11-4 site onto northbound Highway 101, which would extend through and north of the Black Bart Drive intersection. However, the portion of this acceleration lane between the project driveway and Black Bart Drive would also serve as the northbound left-turn lane for turns onto Black Bart Drive. This configuration presents an area of conflict between vehicles turning left at Black Bart Drive and slow-moving trucks in the lower portion of the uphill acceleration lane, as acknowledged on page 222 of the DEIR. The result would be several different potential evasive maneuvers with problematic safety issues:

- Northbound vehicle attempting left turn pulls into lane behind slow-moving truck, requiring rapid deceleration from fast-lane speed. With the truck in front, visibility between the left-turning driver and oncoming southbound traffic will be obscured.
- Northbound vehicle attempting left turn pulls into lane ahead of slow-moving truck, . potentially requiring rapid deceleration depending on the remaining distance in front of the truck before reaching the intersection. The slow-moving truck must choose between avoiding the left-turning vehicle by pulling into the fast lane before reaching sufficient speed, or slowing and potentially stopping until the vehicle ahead makes the turn and then proceeding to use the remaining portion of the acceleration lane, which will not be long enough to reach adequate speed before merging into the fast lane.
- Northbound vehicle attempting left turn is stopped waiting for a gap in southbound traffic, . when an accelerating truck approaches from behind. The problematic options for the slow-moving truck are the same as described in the immediately preceding bullet point.

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The Revised DEIR downplays these circumstances by stating that the observed frequency of left turns onto Black Bart Drive and trucks turning left out of the quarry, the presence of both vehicle movements in the median lane would be a rare occurrence, and that 97 percent of vehicles turning left onto Black Bart Drive would not experience conflicts with trucks during the peak hours in July and October. However, the remaining percentage of vehicles still represents the likelihood that such conflicts and the resulting potentially hazardous maneuvers described above would occur several times every day during peak traffic seasons. The DEIR does not cite the methodology used to calculate that 97 percent of vehicles turning left at Black Bart Drive would not experience conflicts with trucks turning left from the quarry.

The Willits Bypass project is no longer funded, and both the future availability of funding and the construction schedule appear speculative at this time. The Revised DEIR traffic analysis assumed that the Willits Bypass construction would start in 2012 and be completed in 2016 (page 204). Without the Willits Bypass, the significance after mitigation of bad weather safety Impact 4.4-D at the project access driveway requires revision. Mitigation Measure 4.4-D.1 on page 223 states that once the Willits Bypass is constructed, northbound truck drivers wanting to turn left into the quarry during periods of reduced visibility will be required to proceed north to the first Bypass interchange and use the ramps to reverse direction and access the project via a right turn from the north. The subsequent paragraph on impact significance after mitigation states that there remains some hazard of drivers turning left into the project until the Willits Bypass is constructed. Given the uncertainty about construction of the Willits Bypass, additional mitigation should be identified for this safety impact; otherwise, a significant safety impact should be determined.

The vehicle miles traveled (VMT) data in Table 5.2-1 on page 363 of the Revised DEIR presents several discrepancies that must be addressed with further explanation or correction:

- 11-7 Under Base Permit, the annual trip amount shown for Harris Quarry Aggregate is 3,719. However, using 93,000 cubic yards per year hauled from the project site and an average truck capacity of 16 cubic yards, as described under "Existing Permit Conditions" in Appendix C, the total annual trips would be 5,812.
- Under Project, the annual trip amount shown for the Harris Quarry Aggregate is 7,550. 11-8 However, using 258,000 cubic yards per year to be hauled from the project site, and average truck capacities of 20 cubic yards for aggregate trucked to the Willits concrete plant and 16 cubic yards for other aggregate material and AC, as described under "Project Trip Generation" in Appendix C, the total annual trips would be 15,660.
- Under Project plus Near Term Cumulative, the annual trip amount shown for Harris Quarry is 9,420. This increase of nearly 1,900 trips, or 25 percent, over the Project annual trips does not make any sense, given that total Quarry Aggregate annual trips are assumed to remain constant at 38,940 while the new Kunzler Quarry north of Ukiah is shown as absorbing 7,845 of those trips. A more reasonable outcome with the addition of the Kunzler Quarry would appear to be a reduction of annual trips at the Harris Quarry and other quarries where an increase was also shown; this would be consistent with the outcome described for the Harris Quarry Project, which showed the annual trips being reduced at all other quarries listed compared to the Base Permit scenario.

These discrepancies raise significant questions as to the reliability of the model used to calculate the VMT results presented in the Revised DEIR.

Alternative 3 – Quarry Only and Alternative 6 – Reduced Production both assume that the traffic 11 - 10safety improvements on Highway 101 required with the proposed project would not be made under these alternatives. Alternative 3, which would result in approximately the same number of trucks entering and exiting the site as the proposed project, is described on page 371 as having substantially increased traffic safety hazards because of the lack of Highway 101 improvements. As

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described on page 380, Alternative 6 would generate the same amount of traffic as the current base conditions, which is a reduction of trips from the proposed project, and the continuation of existing safety hazards would not be an impact.

The assumption that Highway 101 improvements would not be made with these Alternatives does not provide a reasonable basis for comparison of their traffic impacts with the proposed project. Existing Observed Safety Concerns with the current Highway 101 roadway configuration are described starting on page 207. The section on Acceleration and Deceleration Lanes on page 208 states that the following are warranted under current base permit conditions: northbound left-turn deceleration lane for turns into the quarry, southbound deceleration lane for right turns into the quarry and northbound acceleration lane for left turns out of the quarry. A permit renewal is necessary for the quarry to continue operating at current base permit levels of production, which coincides with Alternative 6, and the conditions of that permit renewal and thereby the description of Alternative 6 should include the warranted Highway 101 improvements. Similarly, approval of Alternative 3 would clearly require Highway 101 improvements similar to the mitigation measures for the proposed project, including the three acceleration/deceleration lanes already mentioned plus a southbound acceleration taper for right turns out of the quarry. Using this reasonable basis of comparison, traffic safety impacts for Alternatives 3 and 6 would be very similar to the proposed project.

This concludes my review of the Revised DEIR. Thank you for the opportunity to provide input on this project.

Very truly yours,

Richard & Haywood

Richard K. Haygood, P.E. Senior Associate

Response to Letter from Richard K. Haygood (TJKM)

- 11-1. The RDEIR inaccurately stated that the 2006 traffic counts were included in Appendix C. To reduce report length, they were removed from that appendix prior to publication and the citation to Appendix C was not caught and removed. The RDEIR should have stated that the counts were In Appendix E of the original DEIR, which is on file for public review at the offices of the County Department of Planning and Building Services. This correction to the text has been made in Chapter 3 of this FEIR. That said, the intersection service level evaluations for the year 2010, 2030 and 2040 presented in the Revised DEIR are based upon the 2006 traffic volume data factored upwards based upon growth projections published by Caltrans District 1 of 1.5%. A review of the initial data and the adjustment factors together with historical traffic volume data, also published by Caltrans, for U.S. 101 in the vicinity of the Harris Quarry shows that the projections for projected traffic volumes for the years 2010, 2030 and 2040 are overestimated. The consequences of this overestimation of traffic volumes results in higher vehicular delay and lower service levels than will likely occur in the future, making the analysis that was performed for the RDEIR conservative. If the analysis were based on lower growth rates, as the commenter suggests, lower projected future traffic volumes would result on U.S. 101 translating to reduced potential project impacts. The traffic engineers agree that the economy has had an impact on traffic volumes on roadways throughout the nation and state. The analysis in the RDEIR is accurate and needs no revision. As Comment Letter 2 from Caltrans states, the EIR-recommended mitigation measures reduce impacts to U.S. 101 to a less-than-significant level.
- 11-2. It is true that with increased production at the Harris Quarry delay on the Black Bart Drive approach would be expected to increase by an average of 2.1 seconds during the 11 a.m. to noon hour in July if the existing geometric conditions were maintained. However, since implementation of the recommended mitigation measures will improve service to LOS C conditions with an average delay of only 17.3 seconds, the impact is less-than-significant. The evaluations and conclusions presented in the Revised DEIR are clear as presented in Appendix C.
- 11-3. The use of "normal" operating periods was intended to provide a sense of the number of truck trips that will likely occur mid-week on average, outside of the July and October peaks used in the detailed analysis. The "normal" operating periods typically are expected to occur in the months of May, June, August, and September (and even less during the winter and early spring months). It is recognized that the number of truck trips to and from the quarry will vary depending upon the need for aggregates on any particular day. Some days will have higher or lower than average demand. Also, there will typically be fewer truck trips to and from the quarry than used to assess worst case conditions during peak travel on Highway 101 in July and October during peak production occurs. In any case, the trips for the peak periods are the ones used to assess actual project impacts.

11-4. The applicant's and the EIR traffic engineers agree that this configuration, like many intersection configurations, presents the opportunity for potential conflict points. However, they feel that the potential conflicts would be reduced when compared to existing conditions, and the proposed configuration represents an improvement.

The recommended highway improvements will allow drivers entering and exiting the Harris Quarry site to accelerate and decelerate outside the through lanes on US 101. Vehicles, primarily loaded trucks, can accelerate to nearly the same speed as through traffic prior to merging into the traffic stream. This reduces the delay to vehicles exiting the site, as drivers only have to contend with one direction of traffic flow on the mainline at one time. The acceleration and deceleration lanes reduce the potential for rear-end collisions by providing a refuge area for vehicles that are accelerating, decelerating, or waiting to turn. The northbound acceleration lane will extend well beyond the intersection of Black Bart Drive and provide the added benefit of allowing drivers turning left onto US 101 from Black Bart Drive to accelerate prior to their merge. The northbound acceleration lane also permits drivers turning left from Black Bart Drive to contend with vehicles moving in only one direction at a time while making the left turn movement onto U.S. 101. This improvement will reduce delay and improve overall levels of service (and safety) to motorists on Black Bart Drive compared to existing conditions.

It should also be noted that in all cases, the levels of service for the minor vehicle movements at the Black Bart Drive intersection and the Harris Quarry approach improve with the mitigation measures in place when compared with existing conditions. Improved service levels and reduced delay for the minor movements at intersections are direct indications that drivers will find it easier to make turn movements into and out of Black Bart Drive. Presented below are responses to specific concerns raised by the commenter.

Northbound vehicle attempting left turn pulls into lane behind slow-moving truck, requiring rapid deceleration from fast-lane speed. With the truck in front, visibility between the left-turning driver and oncoming southbound traffic will be obscured. A driver pulling in behind a slower moving vehicle will need to decelerate. However, as there is adequate sight distance along U.S. 101, a rapid deceleration would not be necessary for a prudent driver. The prudent motorist can see well in advance that there is a truck entering the left-turn lane and can decelerate at a comfortable rate to merge into the left-turn lane without an abrupt speed change.

A driver behind a large truck, on any roadway, can be obscured to opposing traffic. However, a prudent driver following close behind is still required to yield to oncoming traffic before turning left. The prudent driver will slow or stop in the left turn lane waiting for the leading truck to increase the distance separating them and increasing the sight lines to opposing traffic. Having waited until opposing traffic is clear, the turn can then be completed safely.

In addition, this risk should be compared to the existing situation where a northbound driver wanting to enter the left-turn pocket for Black Bart Drive could encounter a slow-moving, accelerating truck in the northbound through lane at or before the left-turn pocket. That driver either needs to slow to pull in behind the accelerating truck or speed up and pull into the left-turn pocket in front of the truck. The increase in risk of accident over existing conditions is slight if any.

Northbound vehicle attempting left turn pulls into the lane ahead of slow-moving truck, potentially requiring rapid deceleration depending on the remaining distance in front of the truck before reaching the intersection. The slow-moving truck must choose between avoiding the left-turning vehicle by pulling into the fast lane before reaching sufficient speed, or slowing and potentially stopping until the vehicle ahead makes the turn and then proceeding to use the remaining portion of the acceleration lane, which will not be long enough to reach adequate speed before merging into the fast lane.

The conditions described are possible; however, the possibility remains very low. Potential conflicts are reduced as both accelerating vehicles and decelerating vehicles are traveling in the same direction. Vehicles turning left from the Harris Quarry site will be traveling slowly as they begin accelerating prior to merging. Should there be a vehicle waiting to turn left into Black Bart Drive the driver of the accelerating vehicle leaving the Harris Quarry site will be traveling slowly and have sufficient reaction time to slow or stop to avoid a collision. Also, the ability to see potentially conflicting vehicles is essential to completing maneuvers safely. There is more than adequate sight distance to permit drivers to clearly see the other vehicle and adjust their speed or delay their turn to avoid a conflict. The slowed or stopped truck will have lost some of the distance needed to accelerate, but this condition will be no worse than existing operations, and the probability of the confluence of these multiple events is very low.

Again, this risk should be compared to the existing situation where a northbound driver wanting to enter the left-turn pocket for Black Bart Drive could encounter a slow-moving, accelerating truck in the northbound through lane at or before the left-turn pocket. That driver either needs to slow to pull in behind the accelerating truck or speed up and pull into the left-turn pocket in front of the truck. The increase in risk of accident over existing conditions is slight if any.

Northbound vehicle attempting left turn is stopped waiting for a gap in southbound traffic, when an accelerating truck approaches from behind. The problematic options for the slow-moving truck are the same as described in the immediately preceding bullet point.

The slow or stopped truck will have lost some of the acceleration distance; however, a shorter acceleration lane is better than the existing conditions and the probability as stated in the RDEIR of the confluence of these multiple events is very low (less than 3 percent for peak periods). Further, responding to the conditions described is well within the capabilities of drivers who operate trucks.

11-5. As noted above, the confluence of multiple events would occur less than 3 percent of the time, and the situation would be better than existing conditions. Also, this 3% confluence applies to the worst case traffic conditions during peak July and October days; for other periods it would be much less. The lane warrant calculations for acceleration lanes and tapers are provided in Appendix G or the Updated Supplemental Traffic Impact Study (Appendix C of the Revised DEIR). The calculations do not show the probability of a potential conflict in the shared left-turn/acceleration lane as it was imbedded in the work sheet that was used and does not show in the printouts. They have been separated out and are shown in the two sheets presented after responses to this letter. The Opposing Volume is the southbound movement on Highway 101, the left turns are the turns being made onto Black Bart Drive and the Advancing Volume are the trucks using the acceleration lane. Note that the factored truck volumes are a worse case scenario that assumes that the trucks leaving the quarry will be traveling at 65 MPH. The model was run for the 2040 July and October numbers for the 11-Noon hour and in both cases the probability is below 3 percent. This overestimates the potential impacts of this project, and that a more realistic evaluation would use the un-factored truck volumes and truck speeds of around 35 MPH. Using non-exaggerated volumes and speed would reveal a much lower probability of potential conflicts.

A key element of the proposed acceleration and deceleration lanes is the ability of motorists to see other vehicles and to have sufficient time to react. This sight distance is called "Decision Sight Distance" and the available sight distance exceeds the 1,050 feet needed for speeds of 65 mph on Highway 101.

- 11-6. The comment is inaccurate regarding the status of the Willits Bypass project; see previous Response 10-7 about the status of this project. This is a planned project. It is accurate that there would remain some risk until the bypass is completed (which is likely to be in 2014 if construction begins in 2012 as estimated). However, as is stated in the conclusions regarding this impact on page 223, the overall reduction in safety hazards outweigh this hazard that would occur until the bypass is constructed.
- 11-7. Vehicle miles traveled (VMT) is the measure of the total miles traveled by residents, customers, employees or delivery of goods to and from a source or location. VMT serves as a measure of the broader potential impacts of vehicle travel on an areawide circulation system and correspondingly relates to fuel consumption and vehicle emissions that include green house gases.

The VMT calculations done for the DEIR showed that truck trips from the Harris Quarry will likely be lower than projected by just dividing the total production potential by the average capacity of haul trucks. The VMT calculations are based upon a fixed demand for aggregates in the County and uniform production costs between quarries. Holding demand and production costs constant, travel time to deliver aggregates becomes the variable that determines which quarry will likely provide a portion of aggregates to the various population centers. The sum of the aggregate demand projected to population centers results in the likely number of truck trips from that quarry. This analysis indicates that with the Harris Quarry

and all other aggregate production sites running at capacity, the share that the Harris Quarry site would need to produce is likely to be less than the project's allowable maximum production. This results in a different number of haul trips to quarries than obtained by simply dividing the production by the capacity of haul trucks. This is explained in more detail below. Nevertheless, the RDEIR assesses a worst case of the project operating at maximum production levels.

The demand for aggregates is a function of population and will increase over time with population. This relationship is recognized in Section 8.3 of the *Background Report for the Mendocino County General Plan Update*. From day to day, month to month, and year to year there will be variations depending upon the locations of major projects; however, over time the demand for aggregates will follow population patterns in the County. Specific projects such as the Willits Bypass are not included in the VMT evaluation as projects of this type change from year to year and do not represent average conditions. For these reasons VMT is calculated on an average annual basis. The total demand for aggregates and asphalt is expected to be met by a combination of quarries, mines, and asphalt plants currently operating within Mendocino County and the neighboring Counties of Humboldt, Lake and Sonoma.

Using the Mendocino County General Plan Update Growth Projections for incorporated cities and adjacent environs, population centers or sub-areas were identified and the distance from the operating quarries to the center of each subarea was determined. Standard gravitational model theory indicates that the portion of total project trips to a sub-area is proportional to the population of the sub-area and inversely proportional to the square of the total trip distance. Using this methodology, quarries that are closer to population centers will provide more aggregate or asphalt to those centers and correspondingly fewer trips to population centers of equal size that are further away. Likewise. larger population centers will have a greater demand potential than smaller centers and will attract more trips from all available sources. Application of this theory indicates that for two quarries or plants of equal size, the one that is closest to a population center will provide more material to that center than one further away. The number of trips and VMT from each quarry and asphalt plant to each population center fulfilling the demand for aggregate and asphalt within the County can then be calculated.

VMT would be expected to increase as the population of Mendocino County increases, resulting in an increase in the demand for aggregate and asphalt. If production levels of aggregate and asphalt within Mendocino County remain constant and the demand increases, the shortfall will be filled increasingly by out-of-county sources. Trips made from out-of-county sources have greater travel distances and result in higher VMT overall. Conversely, the expansion of the Harris Quarry together with asphalt production would result in fewer VMT in the future as a greater portion of the total demand will be met by local quarries and asphalt plants within Mendocino County and less from out-of-county sources.

11-8. See Response 11-7 above. The results of the VMT analysis are that the Harris Quarry will likely not achieve peak production when considering available

capacity of all other sources of aggregate producing aggregates for use in Mendocino County. As stated previously, regardless of this fact, the RDEIR assesses a worst case of the project operating at maximum production levels.

11-9. A review of the calculations revealed a formatting error that resulted in a higher number of trips to and from the Harris Quarry than are actually expected (see Response 11-7). Corrections have been made to Table 5.2-1 of the RDEIR; the revised version is provided below. As seen in the table, the addition of the Kunzler Quarry will result in the redistribution of trips providing aggregates to Mendocino County and will reduce the total vehicle miles traveled by trucks delivering aggregates by 213,190 vehicle miles traveled per year. This revised table is incorporated into the EIR – see Chapter 3. The reduction in VMT now totals 366,712 vehicle miles traveled per year instead of 1,084,440 as shown in the original table. The table was used to assess and compare the impacts of the project against the project alternatives. In those cases where the project or project alternative was reported as reducing the VMT, no change is needed for this discussion. The reduction will be less than assumed, but the discussions were based on a gualitative discussion of a VMT reduction and did not cite actual quantitative VMT reductions. This is because the EIR preparers are aware that such modeling is based on certain assumptions that may need to be revised (as is the case). As is stated on page 365 of the RDEIR, "This VMT analysis is based on several modeling assumptions. It is possible that the reductions on VMT could be less (or more) than described here. However, the modeling does indicate that the project would result in at least some reduction in VMT. Therefore, it is concluded that for Alternative 1, if the project were not approved, there would be an increase in VMT, especially by trucks hauling asphalt." This statement remains accurate, and no changes need to be made to the alternatives analysis except to replace Table 5.2-1.

Revised Table 5.2-1								
Vehicle Miles Traveled Summary								
Quarry Aggregate VMT	Base Permit		Project		Project plus Near Term Cumulative		Change In VMT	
	Annual Trips	Annual VMT	Annual Trips	Annual VMT	Annual Trips	Annual VMT		
Harris	3,719	98,76 I	7,550	225,263	4,494	175,631	76,870	
Davis Pit	3,721	322,636	3,579	318,899	2,889	282,894	-39,742	
Keithly Ranch	4,959	415,506	4,747	401,631	3,847	366,318	-49,188	
DNA River	1,240	145,695	1,209	144,970	972	127,656	-18,039	
Cooks Humboldt	992	133,202	973	129,297	774	98,123	-35,079	
Ford Gravel	9,920	287,671	8,096	236,262	7,597	271,745	-15,926	
Ten Mile	2,480	75,480	2,018	58,816	I,459	38,935	-36,545	
Pieta	2,481	109,033	2,058	89,771	I,605	75,623	-33,410	
Layton Rock	2,480	69,650	2,088	47,997	1,761	29,530	-40,120	
Cooks Valley	2,480	329,488	2,420	319,171	1,925	243,918	-85,570	
Wisley Ranch	744	25,178	591	19,419	422	12,982	12,196	
Coal Mine	1,241	108,060	1,199	104,864	954	80,090	-27,970	
Syar Healdsburg	2,449	326,041	2,412	319,551	1,942	280,657	-45,384	
Kunzler	0	0	0	0	8,341	149,109	149,109	
Total	38,936	2,446,401	38,940	2,415,911	38,982	2,233,211	-213,190	
Plant (AC VMT)								
Harris	0	0	2,644	85,621	2,644	85,621	85,621	
Granite	7,499	284,767	5,444	183,063	5,444	183,063	-101,704	
Baxman	1,718	71,146	1,815	61,089	1,815	61,089	-10,057	
BoDean/Syar (Santa Rosa)	2,501	445,239	1,816	318,347	1,816	318,347	-126,892	
Total	11,718	801,152	11,719	648,120	11,719	648,120	-153,032	
Project Total	50,654	3,247,553	50,659	3,064,031	50,701	2,136,113	-366,222	

Revised Table 5 2-1

Note: VMT = Vehicle miles traveled

11-10. See Response 10-20 to this same comment.

Conflict Probability

Study Location Study Scenario Study Period	<u>Southbound U.S. 101</u> <u>Black Bart</u> <u>Future 2040</u> July 11-Noon				
INPUT Advancing Volume Opposing Volume Left Turn Volume Speed Lanes	Va Vo VI MPH 2 or 4		MPH Lanes		
Required Critical Headway Time to Make Turn Time to Clear	Gc T1 Te	4	Seconds Seconds Seconds		
Time of Wait Mean Headway	Tw Ta	14.45215 112.5	Seconds Seconds		
Mean Arrival Rate	λ	22	Vehicles/Hour		
Mean Service Rate	μ	819.7632	Vehicles/Hour		
Threshold Probability	ρο	0.03			
Probability	ρι	0.026837			
Probability Exceeds Threshold NO					

Conflict Probability

Study Location Study Scenario Study Period	<u>Southbound U.S. 101</u> <u>Black Bart</u> <u>Future 2040</u> <u>October 11-Noon</u>				
INPUT Advancing Volume Opposing Volume Left Turn Volume Speed Lanes	Va Vo VI MPH 2 or 4		MPH Lanes		
Required Critical Headway Time to Make Turn Time to Clear	Gc T1 Te	4	Seconds Seconds Seconds		
Time of Wait Mean Headway	Tw Ta	9.185865 81.81818			
Mean Arrival Rate	λ	22	Vehicles/Hour		
Mean Service Rate	μ	848.7277	Vehicles/Hour		
Threshold Probability	ρο	0.03			
Probability	ρι	0.025921			
Probability Exceeds Threshold NO					

MEC

Howard F. Wilkins III Remy, Thomas, Moose & Manley 455 Capitol Mall, Suite 210 Sacramento, CA 95814

July 17, 2011

Subject: Comments on the Revised Draft Environmental Impact Report for the Harris Quarry Use Permit Project

Dear Mr. Wilkins;

Miller Environmental Consultants (MEC) provided comments on February 4, 2008 on the previous air quality and noise analyses. We understand that those comments are not directly addressed in the Revised Draft EIR, however the updated analyses "may have" taken into consideration some of the earlier comments.

Air Quality Comments on the Revised Draft EIR

1. The project will burn large amounts of diesel fuel, which will result in the emissions of diesel particulate matter.

At the 300-ton per hour rate the Asphalt Plant would consume approximately 547 gallons of diesel fuel per hour.

"In 1998, California identified diesel exhaust particulate matter (PM) as a toxic air contaminant based on its potential to cause cancer, premature death, and other health problems. Diesel engines also contribute to California's fine particulate matter (PM 2.5) air quality problems. Those most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems."

The overall concern for health is a key reason why Keep the Code would like the project to be modified. Key modifications to reduce diesel particulate matter and other toxic air pollutants would be to eliminate the Asphalt Plant from the project and to use more electricity on the site as opposed to diesel generators.

2. The analysis of Greenhouse Gas Emission (GHG) should indicate that Indirect Sources are Significant because they exceed the 1,100 MT CO2e/year threshold.

Table 4.6-21 shows that total indirect GHG emissions of the project would be 1,821 CO2 MT per year. This exceeds the threshold (1,200 MT of CO2e/year) identified in Table 4.6-8 for projects other than stationary sources. This is a significant GHG impact of the project that should be identified in the Revised Draft EIR.

3. Strict controls will be needed on the Asphalt Plant as the Revised EIR has its operation limited to 12-3 10 hours per day and operations averaging only about 1 day per week.

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Mr. Howard Wilkins July 17, 2011 Page 2

The Asphalt Plant seems to be dramatically oversized. It will be able to produce 300 tons per hour (see page 79 of Revised Draft EIR) but production would not exceed 150,000 tons per year (see page 80 of Revised Draft EIR). If operations arewere 10 hours per day, that then there would be a full operational production rate of 3,000 tons per day. This would limit full production to only 50 days per year, or about 1 day of operation per week. How wWill these limits be enforced? The 300 tons per hour matches the quarry revised increased extraction limits, so it appears that the asphalt plant could theoretically use all the quarry output and operate much more frequently than an average of one day per week. Operational limits on peak production, and cumulative production of asphalt is critically important to determine air pollutants. It is not clear in the Revised Draft EIR how the asphalt plant capacity will be limited. Please explain.

4. Some Air Quality Mitigation Measures rely upon future studies and CEQA review that may not be appropriate.

Mitigation Measures 4.6-B.1, 4.6-E.1, 4.6-E.2, and 4.6-F.1 all rely upon additional impact assessment and a somewhat undefined "additional CEQA review "prior to issuing MCAQMD permits". Who will conduct the additional studies? Will they be available to the public? Who will conduct the additional CEQA review? Can we be guaranteed that the public will be made aware of "additional CEQA review"?

5. Will there be a commitment on the applicant's part to comply with Mitigation Measure 4.6-I.1 (page 298 of the Revised Draft EIR)?

This is a laundry list of "recommended measures" – will they actually be required to mitigation GHG emissions? It would be reassuring if the applicant would adopt portions of Mitigation Measure 4.6-I.1 as part of the project prior to finalizing the EIR.

6. For this project, NOx levels are from the combustion of diesel fuel and are a direct indicator of diesel particulate matter which has been shown to increase cancer risk.

The significant NOx impact from increased operations and a new on-site source (Asphalt Plant) will negate improvements in air quality that would otherwise occur through requirements for better fuel and engines to reduce diesel particulate matter. The proposed project would eliminate any local improvements from statewide efforts to reduce diesel particulate matter emissions.

7. All the modeling seems to be based on questionable meteorological data that does not address the site_specific characteristics of the project site. According to the Air Quality Appendix, all of the meteorological data was collected in the area, but not at the project site. This data is probably only generally representative of the area and not representative of the specifics of the project geography, including the north-south valley to the southwest of the project site, Walker Valley, which will act as a conduit for air pollutants if the project is developed. The Revised DEIR Air Quality chapter does not mention any skepticism about the meteorological data that was used for the modeling of dispersions of criteria pollutants, odors, and toxic air contaminants in the Health Risk Assessment. The Air Quality Appendix is clearer about the meteorological data that was used, but in reading the description, one has to wonder about the quality of the data in addition to the concern that it was collected several miles from the project site.

Using appropriate meteorological data is critical to dispersion modeling. It is not clear that appropriate meteorological data was used. Again, the Air Quality Chapter says nothing about the quality or location of meteorological data that was used in the modeling in the Revised DEIR. It turns out that the monitoring

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station is 4.7 miles away from the Harris Quarry and there is no discussion in the DEIR about the site_ specific meteorology at the Harris Quarry. Why is the data from another location 4.7 miles away relevant given the unique terrain at the Harris Quarry and the <u>populated Walker V</u>-alley to the <u>southwest that is the</u> <u>location of the Ridgewood Ranch community</u>. Golden Rule Mobile Home Park and La Vida School? Is the data appropriate? Figure 1 from the Revised DEIR Appendix shows the wind patterns that were relied upon in the Revised DEIR. In the north-south <u>Walker V</u>-alley to the <u>south</u>west of the project site, is such a wind pattern possible? It would seem that the wind pattern would follow the valley more often to the north and south – especially under calm conditions. Here is what the Revised DEIR Appendix says about the modeling:

"Meteorological data from a monitoring station in Willits for February 1, 2004 to January 31, 2005 were used with the ISCST3 model. This monitoring station was located at the former Apex/Remco chrome plating facility in Willits. It was operated in accordance with U.S. EPA protocols between April 2003 and July 2005 (a description of the meteorological data collection is at the end of this appendix). Rural dispersion coefficients were selected because the area consists of open space and lightly developed land uses. The Willits meteorological monitoring site is about 4.7 miles northwest of the concrete/asphalt plant and is the closest meteorological monitoring station to the project area.¹ A wind rose illustrating prevailing wind speeds and directions during February 1, 2004 to January 31, 2005 is included in the description of the meteorological data at the end of this appendix.

Footnote /1/ The MCAQMD operates a meteorological monitoring station in Willits; however, the data collection and quality assurance has not always been performed in accordance with U.S. Environmental Protection Agency protocols. At the suggestion of Dean Wolbach, Air Pollution Control Officer of the MCAQMD, Impact Sciences, Inc. contacted the Environmental Health Investigations Branch (EHIB) of Department of Health Services. In June 2004, EHIB released a public health assessment (PHA) of the former AbexlRemco Hydraulic Corporation chrome plating facility in Willits. The PHA relied on dispersion modeling conducted by the U.S. Public Health Service, Agency for Toxic Substances and Disease Registry, using the MCAQMD meteorological data. As an alternative to obtaining the model-ready meteorological data from ATSDR, DHS indicated that Precise Environmental Consultants, a consultant for Remco, may have a copy of the data used in the PHA. David Suder of Precise Environmental Consultants told Impact Sciences, Inc. that better meteorological data, collected at the Remco site in Willits and reviewed in accordance with USEPA protocols, were available, but not in a format for dispersion modeling. (The PHA also indicates that the MCAQMD data used in that assessment had data inconsistencies.) Mr. Suder provided the meteorological data in a model-ready format. Although the data extended from April 2003 to July 2005, Mr. Suder suggested using the data for the 12-month period from February 1, 2004 to January 31, 2005, due to errors in the data collection or excessive missing data in other portions of the monitoring period."

From the above discussion in the Revised DEIR Appendix, it is unclear how good the meteorology data is that was used in the Revised DEIR and a bigger question is whether the 1-year of data that was collected miles from the project site is really representative of the range of meteorological conditions that will be experienced at the Harris Quarry. Furthermore, the elevation of the Willits meteorological monitoring site is 1,391 feet, whereas the elevation of the proposed asphalt plant site is about 2,200 feet. This elevation difference is compounded by the fact that the proposed asphalt plant site is located on the highest ridge in the area, whereas the Willits meteorological monitoring site is in the Little Lake Valley. These site locations have substantially different geographical characteristics in regard to wind exposure, intensity and direction.

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The site-specific wind characteristics of the proposed asphalt plant are critical to understanding the dispersant pattern of air-bourn pollutants. This critically important site-specific climatological information and analysis should be available for public review and comment.

8. The Revised Draft EIR does not provide substantial evidence that the facility would be centrally located and reduce future NOx emissions.

The idea that the facility is centrally located and therefore actually will improve air quality (by reducing overall Vehicle Miles Travelled related to aggregate deliveries) should be removed from the analysis in the Revised Draft EIR. This concept is based on a brief memo from W-Trans in Appendix B of the Revised Draft EIR. The W-Trans memo explains that their analysis is based on holding aggregate demand and trips at a constant level. The W-Trans memo does not explain how they have determined which quarries will deliver aggregate in the future to which locations. While we acknowledge that location is important, the W-Trans analysis does not consider competitive business practices.

According to the W-Trans analysis (Table 8A), Harris Quarry and Kunzler Quarry will be the main quarries increasing deliveries and VMT and almost all the other quarries will have less-fewer deliveries. This simplistic analysis is nothing more than a simplistic analysis that holds total deliveries constant and expects other quarries will just proportionally reduce their operations. We do not understand why the other quarries would not strive for geographic diversity by cutting prices and increasing their delivery miles – thus increasing total VMT for the total aggregate delivery system.

MEC agrees with the June 16, 2011 letter by Keep the Code to the Commissioners:

• If we leave the "Willits Bypass" issue out of the equation, there is no certainty where a project may develop. If a construction project in the county requires asphalt, then there would be emission of air pollutants, and green house gasses, and consumption of diesel fuel... but not necessarily an increase as a result of this Alternative 6. There is no "central location." The emissions may or may not increase, and to make such an assertion is insupportable and speculative.

Sincerely,

Paul Miller Air Quality Specialist

cc: Keep The Code

Miller Environmental Consultants Rancho Murieta, California 12-8

Response to Letter from Paul Miller (MEC)

- 12-1. The concern regarding diesel particulates is noted for the record. As described in Impact 4.6-I, project-generated DPM emissions would not cause a significant health risk. Additional PG&E-supplied electricity beyond that proposed by the applicant is not available at the site due to inadequate transmission line capacity. The RDEIR assesses project alternatives that exclude the asphalt plant.
- 12-2. Please see Response 8-50 regarding this same comment.
- 12-3. Please see Response 8-18 regarding this same comment regarding how operational limits will be imposed and enforced.
- 12-4. Please see Response 8-62 regarding this issue.
- 12-5. The items are not a "laundry list." The cited mitigation measure states that <u>at</u> <u>least</u> all the listed items in the mitigation measure will be conducted.
- 12-6. The comment is accurate. However, the EIR cannot measure project impacts using a projected future condition as the baseline. The RDEIR calculates and assesses project impacts as required by CEQA.
- 12-7. Site-specific meteorological data sufficient for use with air quality dispersion models were not available for the Harris Quarry site or from other nearby locations in the vicinity of the project site. In order to calculate long term pollutant concentrations, such as annual averages, for use in calculating potential cancer risks due to long term exposures, air quality dispersion models require sequential hourly meteorological data. The meteorological data used for modeling includes hourly values for wind speed, wind direction, ambient temperature, atmospheric stability, and atmospheric mixing heights.

The closest location to the project site where meteorological monitoring has been conducted that includes the requisite meteorological parameters for dispersion modeling on an hourly basis was the monitoring station in Willits. The Willits monitoring station was located near South Main Street, between Franklin Avenue and Walnut Street, at an elevation of about 1,400 feet. This monitoring station is about 4.7 miles northwest of the project site. Elevations at the project site range from about 1,850 feet at the quarry site to about 2,200 feet at the location of the proposed asphalt plant.

Based on the Willits monitoring site location and its surrounding area, meteorological data from this station was considered generally representative of conditions in the region. Since site-specific meteorological data were not available these data were used in the RDEIR dispersion modeling to estimate pollutant concentrations and calculate health risks in the project area. While there would be some variation in meteorological conditions between the Willits site and the project site due to differences in elevation and local topography, for dispersion modeling purposes the Willits data was considered to be reasonably representative of the range of meteorological conditions encountered at the project site. Due to the higher elevation of the project site compared to Willits, wind speeds at the project site are expected to be greater than winds in Willits.

In order to evaluate the representativeness of the Willits meteorological data with respect to the Harris Quarry site and to assess whether these data weret appropriate for use in the RDEIR's dispersion modeling of potential health related impacts from the project, additional meteorological was developed for the Harris Quarry site for this FEIR by Lakes Environmental⁷ based on a high resolution meteorological model designed to analyze the horizontal and vertical structure of the atmosphere. Lakes Environmental used the wind fields and other data produced by the MM5 model (5th generation Mesoscale Model) to produce a set of surface-based hourly meteorological data, including wind speed and wind direction, for the Harris Quarry site location for the same year as the Willits meteorological data (2004) used for the RDEIR dispersion modeling.

The MM5 model is a widely used three-dimensional numerical prognostic meteorology model developed by Pennsylvania State University and the U. S. National Center for Atmospheric Research (NCAR). The model is a limited-area, non-hydrostatic, terrain following sigma-coordinate model designed to simulate or predict mesoscale and regional-scale atmospheric circulation by solving for the full set of physical and thermodynamic equations which govern atmospheric motions⁸. The model uses objective analysis to process observed data at weather stations and output them to a regular grid. Using the gridded MM5 data and a specific site location, surface meteorological data are developed by creating a pseudo meteorological station and extracting the data from the grid cell that contains the site location.

Surface meteorological data derived from MM5 data has been used for air dispersion modeling when other meteorological data are not available. In California, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has prepared MM5 derived surface meteorological data for a number of locations within the San Joaquin Valley where there are no airports with data available for modeling. These meteorological data sets are allowed for use in dispersion modeling for health risk assessment when other data are not available.

Using MM5 data from 2004 and the location of the Harris Quarry, Lakes Environmental developed a set of hourly surface meteorological data for 2004 in the National Weather Service SAMSON format. This data included hourly wind speed and wind direction data. The wind speed and direction data were then used for comparison with the Willits meteorological data for 2004 to assess the reasonableness of the Willits data for use in dispersion modeling for the health risk assessment presented in the RDEIR.

One of the basic methods of graphically presenting the wind conditions, direction and speed, over a period of time at a specific location is through use of a wind rose. The wind rose gives a succinct view of how wind speed and direction are

⁷ http://www.weblakes.com/

⁸ Grell, G.; Dudhia, J.; Stauffer, D. *A Description of the Fifth-Generation Penn State/NCAR Mesoscale Model (MM5)*, National Center for Atmospheric Research, Boulder CO., 1994.

typically distributed at a particular location. Figures 1 and 2 below show wind roses for the 2004 Willits meteorological data and the MM5 derived surface meteorological data for the Harris Quarry site, respectively, during the daytime hours 6 a.m. to 6 p.m. This time period is representative of the conditions when project operations would occur and was also used in the dispersion modeling. The wind directions shown in the wind roses are for the direction that the wind is coming from.

As can be seen in the figures, both wind roses exhibit similar characteristics with the predominant winds from the west through northwest. The Willits data shows the predominant wind direction from the west being much more pronounced than the Harris data. Overall, the Harris data shows a shift in the wind direction from the west to the west-northwest, with the winds being more distributed between the west and northwest than the Willits data. Average wind speeds during the daytime hours at the Willits site and from the Harris data are 6.6 mph and 7.4 mph, respectively, with maximum wind speeds of 19.2 mph and 24.6 mph for Willits and Harris data, respectively. Annual average wind speeds for all hours of the day are 5.1 mph for the Willits site and 7.2 mph for the Harris data.

Based on the comparison of the Willits meteorological data and the MM5 derived data for the Harris Quarry site, several general observations can be made. First, the general pattern of winds is similar between the two sites, with the predominant winds at the Harris site being more distributed between the west and northwest than those observed in Willits. Second, the Harris Quarry site is, on average, expected to experience higher wind speeds than the Willits meteorological data would indicate. The effects of these differences between the Willits and Harris data on the results of the RDEIR air dispersion modeling and associated health risks are discussed below.

The transport and dispersion of pollutants in the atmosphere is governed by a number of factors, one of which is the wind speed. In Gaussian dispersion models, such as the one used for the RDEIR modeling, the pollutant concentration at a downwind location from an emission source is inversely proportional to the wind speed^{9,10}. That is, as the wind speed decreases the concentration increases. Or conversely, for a given level of emissions from a source, the downwind concentration at a specific location will decease as the wind speed increases. Therefore, when considering that the wind speeds used in the dispersion modeling based on the Willits data are likely lower than may occur at the project site the predicted concentrations from the RDEIR dispersion modeling are likely overestimated due to use of lower than actual wind speeds.

In addition to the effect of wind speeds on pollutant concentrations, the location of receptors relative to the emission source and the frequency of winds that would transport emissions towards the receptor must be considered. In the RDEIR, the dispersion modeling for the health risk assessment evaluated

⁹D. Bruce Turner. *Workbook of Atmospheric Dispersion*, U. S. EPA, 1970.

¹⁰ U.S. EPA. User's Guide for the Industrial Source Complex (ISC3) Dispersion Models, Volume II – Description of Model Algorithms. September 1995.

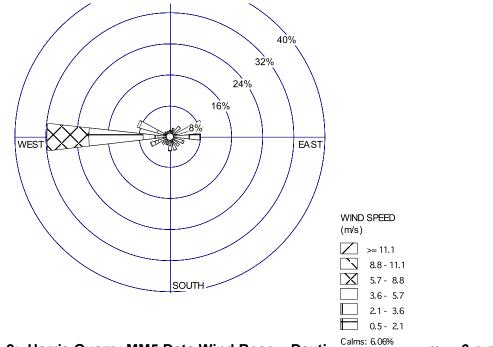
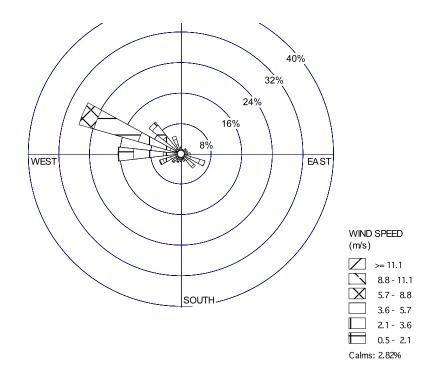


Figure 1: Willits, CA Wind Rose - Daytime Hours (6 a.m. - 6 p.m.

Figure 2: Harris Quarry MM5 Data Wind Rose – Dayti





pollutant concentrations at locations of sensitive receptors. These included the residences off of Black Bart Drive to the west of the project; sensitive receptors to the south of the project site, which include the Church of the Golden Rule and the Golden Rule Mobile Village, and La Vida School; the CAL FIRE station north of the project site on the east side of Highway 101; and the commercial/residential area on the west side of Highway 101 near Black Bart Drive. In order for the Black Bart Drive residential receptors to be affected by emissions from the Harris Quarry, the winds would come from the east-southeast through southeast. Winds from the north-northeast through the north would transport project emissions towards the receptors south of the project (Church of Golden Rule, Golden Rule Mobile Village, and La Vida School), and winds from the southsoutheast through south would transport project emissions towards the CAL FIRE station and the commercial/residential area adjacent to Highway 101 at Black Bart Drive. The RDEIR identified that the maximum health risks would occur at the receptors in the commercial/residential area adjacent to Highway 101 at Black Bart Drive. These receptors are closest to the project site.

To evaluate what effects the use of the Willits meteorological data may have on modeled concentrations in areas of sensitive receptors when compared to use of site specific project data, the MM5 derived Harris meteorological data was used as a surrogate for actual site specific measured data. This allows for reasonable conclusions to be drawn as to the appropriateness of the Willits data used in the RDEIR dispersion modeling and assess whether use of site specific monitoring would likely change the findings of the RDEIR.

For both the Willits data and the MM5 Harris data, the frequency of occurrence of winds, by time of day, along with the average wind speed, for each of the sixteen cardinal wind directions were calculated. Table 2 below summarizes the wind direction frequency and average wind speed during the daytime hours (6 a.m. to 6 p.m.) for both sites.

	Wind	Willits Wir	nd Data ¹	Harris MM5 Wind Data ¹		
	Directions Affecting Area	Wind Direction Frequency	Average Wind Speed	Wind Direction Frequency	Average Wind Speed	
Receptors	(deg)	(%)	(mph)	(%)	(mph)	
Golden Rule ²	NNE – N	1.4	3.8	3.1	6.0	
Black Bart Residences	ESE – SE	3.6	3.1	5.6	8.8	
Hwy 101/Black Bart Dr. ³	SSE – S	3.7	4.2	2.3	5.9	
CAL FIRE Station	SSE - S	3.7	4.2	2.3	5.9	

 Table 2: Summary of Willits and Harris MM5 Wind Statistics

 For Winds Affecting Sensitive Receptors

¹ Wind data for daytime period between 6 a.m. and 6 p.m.

² Includes the Church of the Golden Rule, Golden Rule Mobile Village, and La Vida School

³ Location of maximum health risks identified in RDEIR.

Using the data in Table 2 above the potential effects on the RDEIR dispersion modeling from use of the Willits meteorological data can be evaluated. While there are factors other than wind speed and direction that affect the transport and

dispersion of pollutant plumes, such as atmospheric stability, temperature, and the mixing depth of the atmosphere, wind speed and wind direction play a primary role in determining what a resulting concentration will be. As discussed above, a change in wind speed will directly change the concentration. If the wind speed increases, the resulting concentration decreases. For a receptor to be affected by an emission source the winds need to be blowing in the direction of the receptor from the source in order to transport the pollutants to the receptor. An increase in the frequency of winds in the direction of a receptor from a source indicates that the long term average concentration will also increase. The actual magnitude of the increase will depend on the individual hourly wind directions and the geometric relationship between the source and receptor.

Based on the information in Table 2, the RDEIR modeled concentrations at the CAL FIRE station and the commercial/residential area along Highway 101 near Black Bart Drive using the Willits meteorological data are likely overestimated since the frequency of wind in the direction of these receptors is higher for the Willits data compared to the Harris MM5 data, resulting in fewer hours of the year winds that the project could affect the receptors. Additionally, the wind speeds from the Harris MM5 data are greater than those used for the modeling with the Willits data, which would decrease the modeled concentrations. Since the highest health risks reported in the RDEIR were for the commercial/residential area along Highway 101 near Black Bart Drive, use of site specific meteorological data would likely result in lower concentrations and health risks. Thus, the maximum health risks for the project are likely lower than those reported in the RDEIR.

For receptors in the residential area of Black Bart Drive, modeled concentrations using the Willits meteorological data and associated health risks would likely be similar or lower if site specific meteorological data were used. Although there is an increase in the frequency of wind towards these receptors (5.6% for the Harris MM5 data compared to 3.6% for the Willits data), there is a substantial increase in the wind speeds associated with the winds towards the receptors in the Harris MM5 data (8.8 mph for the Harris MM5 data compared to 3.1 mph for the Willits data), resulting in decreased concentrations. Therefore, the health risks for these receptors would likely remain the same or decrease if site specific meteorological data were used. The health risks reported in the RDEIR associated with these receptors was well below the MCAQMD health risk significance threshold.

Modeled concentrations and associated health risks reported in the RDEIR for the receptors located south of the project site (Church of the Golden Rule, Golden Rule mobile Village, and La Vida School) were likely underestimated from use of the Willits meteorological data in the dispersion modeling. As shown in Table 2, the frequency of winds towards these receptors is 1.4% for the Willits data compared to 3.1% for the Harris MM5 data. This indicates that emissions from the project would likely affect these receptors more frequently if site specific meteorological data were used. The average wind speed for the Harris MM5 data for winds affecting these receptors is greater than the average wind speed for the Willits data (6.0 mph for the Harris MM5 data compared to 3.8 mph for the Willits data). The increased wind speed at the project site would act to decrease the average concentrations. However, due to the magnitude of the increased frequency of winds towards these receptors, it is likely that the average annual concentrations and associated health risks based on use of the Willits data would increase from what was reported in the RDEIR. Based on scaling of the wind frequency and speed data, it is estimated that the annual concentrations could increase by 30% to 50%.

In the RDEIR the increased cancer risks for persons at the Church of the Golden Rule from the proposed project for 30 years of operation were calculated as 0.02 cases per million people, and 0.04 cases per million people for the Golden Rule Mobile Village. For operation of the proposed project for 70 years, the increased cancer risks would be 0.14 per million for the Church of the Golden Rule and 0.17 per million for the Golden Rule Mobile Village. The MCAQMD threshold of significance for increased cancer risk from a project is 10 cases per million.

The primary reason that the risks are low in area south of the quarry is due to the distance between the quarry and the receptors, about one mile or more. While meteorological conditions and the frequency of wind towards sensitive receptors obviously plays a part in the concentrations that these receptors will be exposed to, the degree of pollutant dispersion over the range of a mile is the predominant factor that results in very low pollutant concentrations and associated health risks.

In order for increased cancer risks from the proposed project to be considered significant in the area south of the quarry, they would have to be 60 to 250 times higher (6,000% to 25,000% higher) than those estimated in the RDEIR. The possible underestimation of annual pollutant concentrations due to use of the Willits meteorological data for the dispersion modeling in the RDEIR would not change the RDEIR conclusion that potential health risks effects at the Church of the Golden Rule or the Golden Rule Mobile Village would be considerably lower than the MCAQMD health risk significance thresholds.

Overall, based on review and comparison of the Willits meteorological data and surface meteorological data developed for the Harris Quarry site using the MM5 model, the Willits data appears to be reasonably representative of meteorological conditions at the Harris Quarry site. However, as may be expected due to elevation differences and the effects of local topography, there are variations between the Willits data and the MM5-derived Harris data. In particular, the Harris data shows a consistent increase in wind speed compared to the Willits data. The Harris data also shows a wider variation in the wind directions from the predominant wind direction (north through northeast) than the Willits data. From an air quality dispersion modeling perspective, given that actual site specific measured meteorological data are not available for the Harris Quarry site, use of the Willits meteorological data for the modeling conducted in support of the health risk evaluation in the RDEIR is both reasonable and appropriate. Use of site specific meteorological data for modeling would not substantially change the results from those presented in the RDEIR. Use of such data would not result in a new impact, substantially increase the severity of the reported impact, require additional mitigation, or alter the conclusions in the RDEIR.

12-8. Please see Response 11-7 regarding the issue of VMT and aggregate supply and demand. As stated in the RDEIR, the project would reduce regional VMT. The VMT analysis does not include providing aggregate or asphalt for the Willits Bypass project. There are no grounds for removing the discussion of VMT from the RDEIR. July 19, 2011

TO:

Chip Wilkins Remy, Thomas, Moose & Manley, LLP 455 Capitol Mall, Suite 210 Sacramento, CA 95814

FROM:

Matthew O'Connor, PhD, CEG #2449 Principal Geomorphologist/Hydrologist President, O'Connor Environmental, Inc.



Subject: Comments on Harris Quarry Permit and Reclamation Plan-Revised Draft Environmental Impact Report (SCH# 2006112087)

Introduction

I have reviewed the aforementioned document, including selected supporting documents¹, and am offering comments pertaining to geologic conditions and slope stability at the site of the proposed asphalt processing facility. I have conducted this review as a consultant to Keep The Code, from which I am receiving compensation. I am well-qualified to offer these comments owing to my academic and professional training, and my experience in the geomorphology of the northern California Coast Range. I have a PhD in Forest Hydrology from the University of Washington (1994), as well as an MS in Wildland Resource Science from University of California, Berkeley (1986), and a BS in Environmental Earth Science from Stanford University (1981). I have been practicing as a private consultant since 1993, and have been practicing in northern California over ten years. I have worked on numerous projects evaluating hydrologic, geologic and geomorphic conditions for projects in northern California as Principal Geomorphologist/Hydrologist and President of O'Connor Environmental, Inc.

Summary

It is my opinion that slope stability hazards associated with the proposed grading and drainage plans for the asphalt processing facility (APF) have not been adequately evaluated in the Revised Draft EIR (RDEIR). Although Mitigations 4.1-B.1 and 4.1-B.2 implicitly acknowledge potential slope stability hazards associated with construction of the APF and provide for substantial additional geologic assessments in the project design phase, the RDEIR does not clearly identify and describe these potential hazards. I believe that it may be appropriate for some of these studies to be completed prior to project approval in order that the environmental review process is more fully informed regarding potential slope stability hazards. Specific comments, observations from the RDEIR, and supplemental information follow.

¹ Blackburn Consulting, Inc. (2005) "Geotechnical Report on Processing Facilities Pad". Unpublished report prepared for Northern Aggregates, Inc. 8 pages plus 3 figures and appendix.



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Geologic Characterization of Asphalt Processing Facility

The geologic studies acknowledge the nearby Maacama Fault Zone, an active fault with maximum moment magnitude of 7.4 (RDEIR p.103). The Blackburn geotechnical report identified previously mapped, large, complex rock slides and earthflows south of the existing quarry site (see RDEIR Fig 4.2-2), apparently based on their review of published geologic maps. The RDEIR (p. 105) states "...the asphalt processing facility is proposed for an area of unknown subsurface conditions. The area is mapped as Franciscan and much of the Franciscan bedrock in the region consists of cohesive blocks of rock in a tectonically sheared mélange of weaker sandstone and/or shale." In the RDEIR, the description of groundwater conditions notes that "[S]everal springs are present to the north and west of the quarry area, in an area mapped as having intensely fractured sedimentary and meta-sedimentary bedrock"(p. 108). Blackburn's geotechnical report identified a "shallow, earthflow slump with serpentine material" (Blackburn Consulting, p.2), approximately 300 ft long and 100 ft wide located under the proposed APF extending under the proposed fill slope on the southwest edge of the APF. Exploratory trenches TP-1 and TP-2 suggested that the depth of the earth material associated with the slump was about 9 ft, below which depths the earth materials were harder and resisted excavation. Blackburn Consulting did not, however, provide any evaluation of stability of slopes below the proposed APF that will be subject to additional loads owing to grading and fills for the APF site. This geologic hazard is implicitly recognized by Mitigation 4.1-B.2-2 (RDEIR Table 2-2). Finally, all drainage from the APF is to be routed through a bio-swale resulting in concentrated and increased runoff to the small channel and slopes below the APF (RDEIR Fig. 3-7), adding to potential instability down-slope of the APF caused by accelerated erosion of the channel and/or soil saturation. The diversion of runoff to a new location on this slope west of the APF poses a substantial potential hazard because these earth materials are sensitive to increases in soil moisture.

The potential for unrecognized slope stability hazards below (west) of the APF is substantial. In a study of the Forsythe Creek watershed², I conducted aerial photo reconnaissance mapping of the area to identify hillslopes comprised of complex rock slides and earthflows. I used Mendocino County R.C.D. aerial photo stereo-pairs of color photos at 1 inch to 2,000 ft scale from March 2004, supplemented by limited field observations. These complex features contain numerous overlapping features of different ages and activities such that mapping discrete features is difficult. The APF site lies on the upper margin of one such map unit, which is widely distributed in the Forsythe Creek watershed. Areas within these complex rock slides and earthflows lower on the hill slope tend to have greater instability. Based on these observations and interpretations, there is potential for substantial stability hazards on the slopes below the APF.

² Bioengineering Associates (2006) Forsythe Creek Watershed Assessment. Prepared for the Mendocino County Resource Conservation District and Coyote Valley Tribe.



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Comments on Harris Quarry RDEIR

Conclusion

The RDEIR does not ignore potential slope stability problems associated with grading, cuts and fills necessary for the APF. It implicitly acknowledges that potential hazards do exist as demonstrated by Mitigation 4.1-B.2. However, the RDEIR tends to obscure the degree of hazard that exists. The presence of an earthflow near the center of the APF site noted in Blackburn's report is not mentioned in the RDEIR. In addition, the evaluations of the geomorphology and stability of the APF site rely on published maps to characterize the slopes adjacent to and below the APF. Although there is a relatively detailed geotechnical assessment of the APF site, I could not find any substantial reconnaissance or other evaluation describing slope conditions below (west) of the APF site in the RDEIR or its supporting documents. Given the extent of complex rock slides and earthflows I observed in this area in my previous study of Forsythe Creek, the presence of an earthflow on the APF site, the loading of slopes that will occur as the result of grading and fills for the APF, and the addition of runoff to these slopes from APF bio-swale drainage, I believe that the RDEIR has not sufficiently described potential geologic impacts of the project that create a substantial slope stability hazard.



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Response to Letter from Matthew O'Connor (OEI)

13-1. Blackburn Consulting, Inc. (BCI) conducted an updated site review on September I5, 2011 to review the current slope conditions at the asphalt facility site given the concerns raised in this comment letter. Their September 2005 study of that site concluded the following:

"Scattered outcrops of hard, metavolcanic rock are exposed along the steep (natural) slopes west and south of the site, with some outcrops of serpentinized metavolcanic and/or metasedimentary, rocks. Some of the serpentinized rock occurs as blocks of resistant rock within a soft. clay-rich matrix. We observed a shallow, earthflow slump within serpentine materials at the southwest side of the site; we show the limits of this slump at Figure 2.

With the exception of the shallow slump. the natural slopes appear stable with no evidence of deep-seated landsliding. Based all our observations of existing cults in the area. the native (weathered rock) materials typically stand at slope gradients of *I*: I or steeper without significant erosion or failures."

Based on those observations, they conducted subsurface exploration and testing at the site, including the area of the shallow slump. The geotechnical report contains specific recommendations for site grading, rock excavation, fill placement, slope construction, treatment of the shallow earthflow, subdrainage and erosion control. Those recommendations were incorporated into the project plans prepared by Rau & Associates. The slope conditions they noted on September 19, 2011, including the limits of the shallow earth flow slump, are essentially unchanged from those observed in 2005.

The geotechnical report recommends keyways at the toe of all fills exceeding 5 feet in height. The minimum keyway width is 10 feet (20 feet for fills exceeding 20 feet in height) with a minimum depth of 3 feet into rock as determined by BCI. This meets or exceeds typical construction practice for fill slopes in the north coast area and is consistent with dozens of slope designs, including many successful highway embankments and landslide repair slopes, that BCI principal doing the analysis has conducted in his 36 years of geologic/engineering work. This design applies the imposed fill loads to the underlying stable rock (hence the rock keys) and not to shallow, potentially unstable material on native slopes beyond the site.

The EIR Geotechnical subconsultants (Questa Engineering) concur with this statement and note that while the existence of a shallow earthflow slump in the area of the asphalt plant was not explicitly stated in the RDEIR, a potential for unstable earth materials in the asphalt plant area was clearly noted. Mitigation Measure 4.1-B.2 would further serve to address any slope stability issues. This includes supplemental slope stability analysis to provide for the long-term stability of the fillslope.

In a response to the comments from OEI, BCI has indicated that the September 2005 report was intended as a design level geotechnical investigation and

provides specific recommendations for fill construction and cut slopes, including in the earthflow slump area at the southwest edge of the proposed asphalt plant site. As such, the mitigation measures shall be re-written – see Response 15-2.

- 13-2. The slopes west of the fill were reviewed and considered by Blackburn Consulting and included in the project design insofar as they will impact, or be impacted by, the project. The project plans address these slopes by incorporating specific geotechnical recommendations for site grading, excavation, fill placement, slope construction, subdrainage and erosion control. The one shallow earthflow affected by the project will be mitigated during site grading.
- 13-3. The runoff from the asphalt plant site would enter a swale that drains southwest towards Forsythe Creek. This swale does not travel east near the proposed fill. At its nearest point the swale is over 360 feet from the toe of the fillslope, and it drains away from the fillslope (see Figure 3-7 of the RDEIR). The additional runoff conveyed to this swale would not be substantial. More importantly, the swale is not near the fillslope, and runoff in this swale would have no effect on the stability of the fillslope.
- 13-4. This information is noted for the record. As described in the previous three responses, the fillslope has been designed to be stable in this landscape. With EIR-recommended mitigations, the impact regarding slope stability, including under seismic conditions, would be less than significant.
- 13-5. See Response 13-2 to this same issue. The commenter is incorrect in stating that the RDEIR did not sufficiently addressed project geologic impacts. The potential impacts were assessed by a qualified geotechnical consulting firm (Blackburn Consulting, Inc.), the project plans were developed consistent with their recommendations, and the Blackburn Consulting reports and the project plans were peer reviewed by the Certified Engineering Geologist and Registered Geologist of Questa Engineering, Inc. who were technical subconsultants for the RDEIR. The RDEIR recommended additional mitigations, including supplemental slope stability analysis to provide long-term stability. There is no evidence that a project constructed consistent with the project plans and the EIR-recommended mitigations would have more significant impacts than addressed in the RDEIR. However, it is recognized that the commenter may still disagree, which would constitute a disagreement among experts.