

Air Quality Regional Conformity Analysis and PM₁₀ Local Hot Spot for Olancha- Cartago 4-Lane

09-INY-395-29.2/41.8

EA-09-21340-Project Number-0900000030

Prepared by the State of California Department of
Transportation

February 2014



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Terry Goewert, Associate Environmental Planner
Central Region Environmental Engineering Branch

Date: Feb 10, 2014

Reviewed By: Ken J. Romero
Ken J. Romero, Chief, Central Region
Environmental Engineering Branch

Date: 2/10/14

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Section 1. Introduction and Project Description

This Air Quality Regional Conformity Analysis and local Hot Spot contain the information that is required by FHWA to make an air quality conformity determination for the Olancha-Cartago 4-Lane Widening Project pursuant to Section 6005 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This analysis has been prepared to be consistent with FHWA's June 21, 2007 guidance on Project-Level Conformity Determinations and NEPA Assumption and Conformity Analysis Documentation checklist.

1.1. Project Description

The California Department of Transportation (Caltrans) proposes to convert approximately 12.6 miles of the existing U.S. Highway 395 from a two-lane conventional highway into a four-lane expressway or partial conventional four-lane highway from post mile 29.2 to post mile 41.8 in Inyo County. The new facility will have four 12-foot lanes with a variable median width. There will be paved shoulders throughout the project, five feet wide on the inside and ten feet wide on the outside. The project will construct new concrete bridges to cross the Los Angeles Aqueduct, and install concrete box culverts and smaller pipe culverts throughout the project limits to promote drainage. A borrow site at the end of Fall Road and south of Olancha Creek may be used to provide soil and road materials for the project. Additionally, a route adoption is proposed for U.S. Highway 395 and State Route 190.

Alternative 1 proposes constructing segments of conventional all-paved, conventional divided and controlled access four-lane divided highway along the existing U.S. Highway 395 alignment.

Alternative 2 proposes construction of a controlled access four-lane divided expressway with the northbound and southbound lanes separated by at least a 100-foot-wide unpaved median throughout the project along the existing U.S. Highway 395 alignment.

Alternative 2A is a variation of Alternative 2, and proposes that the controlled access divided four-lane expressway be constructed to the west of the community of Cartago with the northbound and southbound lanes separated by at least a 100-foot-wide unpaved median throughout.

Alternative 3 proposes construction of a controlled access divided four-lane expressway to the west of the community of Olancha with the northbound and southbound lanes separated by at least a 100-foot-wide unpaved median throughout the project.

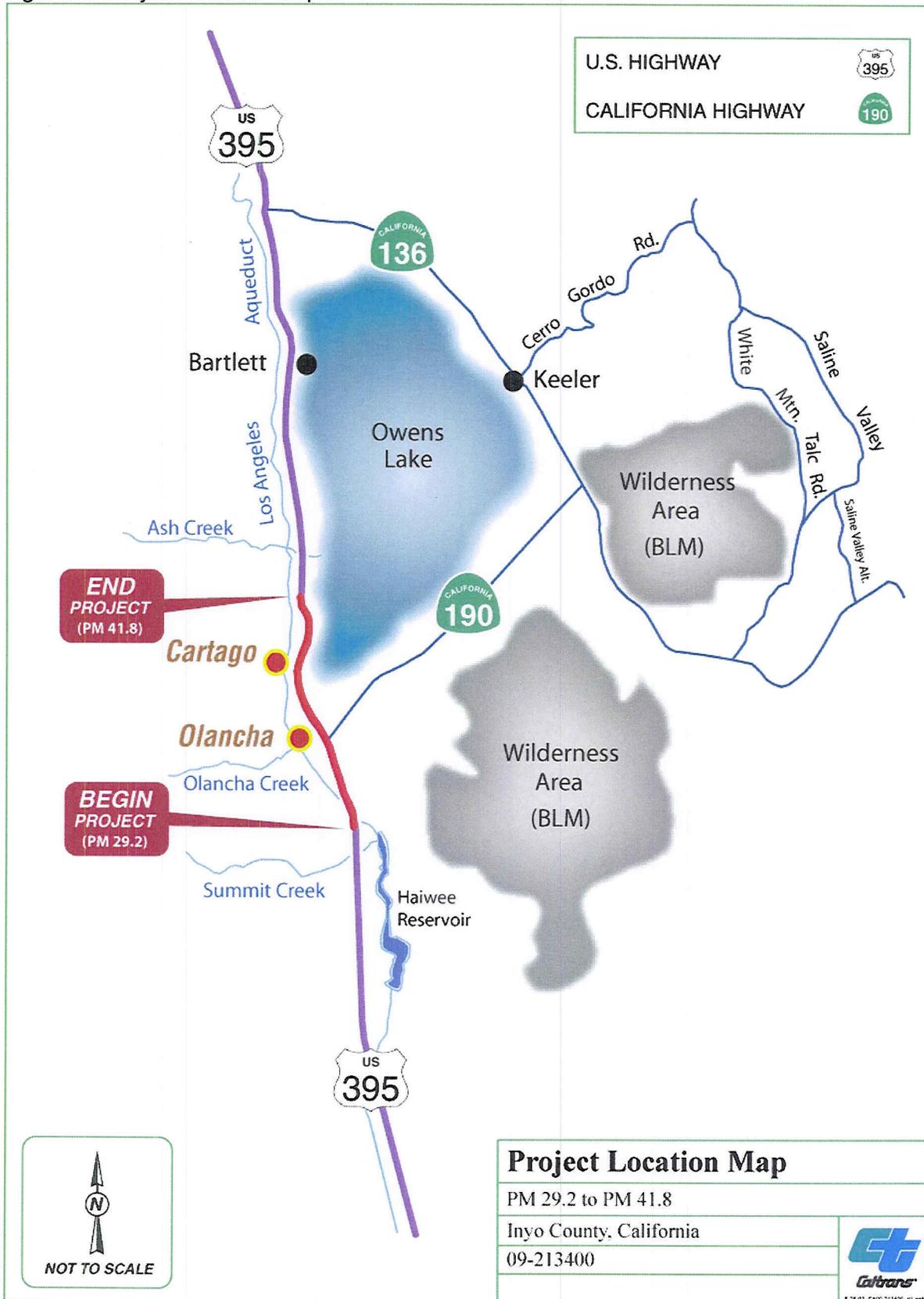
Alternative 4 proposes construction of a controlled access divided four-lane expressway to the west of the communities of Olancha and Cartago with northbound and southbound lanes separated by a variable width median throughout the project to avoid utilities.

The preferred alternative is a combination of Alternatives 3 and 4. The combined alternative will be a controlled access, four-lane divided expressway that would pass west of Olancha and the Los Angeles Aqueduct (Alternative 4). Once the alignment crosses Olancha Creek, the preferred alternative would cross the Los Angeles Aqueduct and continue north through Cartago along the existing highway to meet up with the four lane section of U.S. Highway 395 to the north (Alternative 3). The northbound and southbound lanes would be separated by an unpaved median at least 100 feet wide

The “No-build” alternative proposes to leave the facility as it currently exists.

The construction is expected to begin approximately 2017 and last 24 months with the open to traffic year 2019.

Figure 1. Project Location Map



1.2. Air Quality Regulatory Framework

The project is located in Inyo County within the Great Basin Valleys Air Basin. The Air Basin is further divided into four areas that are in non-attainment for the federal PM₁₀ criteria pollutant standards. The Olancho-Cartago project is in the Owens Lake Area. The Great Basin Unified Air Pollution Control District is responsible for enforcing federal, state and local air regulations in the Basin.

Table 1 lists the attainment status for federal criteria pollutants:

Table 1. Project Area Attainment Status

Criteria Pollutant	Federal Attainment Status
Ozone (O ₃)	Attainment
Nitrogen Dioxide (NO ₂)	Attainment
Carbon Monoxide (CO)	Attainment
Particulate Matter (PM ₁₀)	Nonattainment-Serious
Particulate Matter (PM _{2.5})	Attainment-Unclassified

Source: ARB website, EPA "Green Book"

This analysis focuses on the criteria pollutant of PM₁₀.

Section 2. Regional Conformity

The Olancho-Cartago project is located in an isolated rural area.

The approved 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (SIP) and the September 2013 Amendment to the Owens Valley State Implementation Plan, are the applicable plans for this project. The Owens Valley Area does not have an Emissions Budget for PM₁₀. The SIP does not have a Regional Emissions Test since on-road emissions has been determined to be negligible in the Owens Valley Area.

Monitoring and research by the GBUAPCD conducted for more than 20 years, as well as three previous State Implementation Plans (SIPs), has determined that wind-blown dust from the dry bed of Owens Lake is the dominant cause of NAAQS violations for PM₁₀ in the non-attainment area (2008 SIP, Chap 3.1). Vehicle emissions accounted for only 4 tons out of approximately 86,000 tons at the time of the 2006 annual PM₁₀ emissions inventory.

Construction Emissions can cause PM₁₀ from fugitive dust and construction vehicle emissions, so construction emissions must be considered for the project.

Although there is no specific control measures discussed, this does affect the construction phase of the Olancha-Cartago project. The construction phase of the project, estimated to last about 24 months, would be considered to be a “Secondary Source” by the District. Before the start of construction, an Emission Management Plan must be submitted to and approved by the GBUAPCD. Requirements to minimize PM₁₀ emissions typically include but are not limited to the contractor being required to use water trucks on unpaved areas, street sweepers on paved roads, minimizing the height of any stockpiles, and shutting down all earthmoving operations when the ambient wind speed exceeds approximately 20 mph.

Table 1 shows the total and annual PM₁₀ construction emissions estimates. Caltrans staff used the latest version (7.1.4) of the Sacramento Metropolitan Air Pollution Control District’s Road Construction Emissions Model (see Appendix B) to calculate emissions during the 24 month construction phase. Annually, the estimated emissions would be approximately 25 tons PM₁₀, with a total of 50.2 tons for both years. The estimated 25 tons per year is less than 70 tons/year discussed in the General Conformity Rule (applying EPA New Source Review de minimus thresholds – 40 CFR 93.153), de minimus emission limit for PM₁₀ in a Serious area (e.g. Owens Valley), Caltrans considers that this project would not interfere with timely implementation of the State Implementation Plan nor create a temporary “hot spot” during construction.

Table 2. Total and Annual PM₁₀ Construction Emissions Estimates

	Total PM₁₀	Exhaust PM₁₀	Fugitive Dust PM₁₀
1 year	25.1	0.8	24.2
Both Years (approx 24 months)	50.2	1.8	48.4

Source: Caltrans Central Region Environmental Engineering (see Appendix B)

Section 3. Project-Level Conformity

3.1. PM10 Hot-Spot Analysis

Qualitative particulate matter (PM) hot-spot analysis is required under the EPA Transportation Conformity rule for Projects of Air Quality Concern (POAQC), as described in EPA's Final Rule of March 10, 2006 (U.S. EPA Guidance of March 29, 2006). Projects that are not POAQC do not require detailed PM hot-spot analysis.

According to the EPA Transportation Conformity Guidance (final Rule), March 10 2006, the following types of projects are considered POAQC:

- 1) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles (significant number is defined as greater than 125,000 Annual Average Daily Traffic (AADT) **and** 8% or more of such AADT is diesel truck traffic, or in practice 10,000 truck AADT or more regardless of total AADT; significant increase is defined in practice as a 10% increase in heavy duty truck traffic);
- 2) Projects affecting intersections that are at a Level of Service D, E, F, with a significant number of diesel vehicles, or that that will change to Level of Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- 3) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- 4) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; or
- 5) Projects in or affecting locations, areas, or categories of sites which are identified in the PM2.5 or PM10 implementation plan or implementation plan submission, as appropriate, as sites of possible violation.

The proposed project is not considered a project of air quality concern for PM₁₀ (POAQC) because it does not meet the definition of a POAQC as defined in EPA's Transportation Conformity Guidance.

The project has undergone Interagency Consultation (IAC) in February-March 2010. Some of the IAC participants (including EPA) then concurred that the project is not a POAQC (see Appendix D). The request for concurrence that this was Not a Project of Air Quality Concern was unclear to FHWA, as the letter sent for interagency consultation was somewhat of a hybrid of a "not a project of air quality concern" memo and the more formal "request for Project Level Conformity".

The Caltrans project manager recently verified that the traffic data used in the 2010 PM Hot Spot is still valid and is shown in Table 2. Although the percent trucks is 21.5%, the overall AADT is so low that the truck AADT for build out year is still well below the 10,000 AADT that could qualify this project as a POAQC.

Table 3. Recent and future traffic forecast

Year	AADT Build	AADT No-Build	Truck Volume Build	Truck Volume No-Build
2008	5600	5600	1204	1204
2017	6130	6130	1317	1317
2023	6540	6540	1406	1406
2027	6980	6980	1500	1500
2037	7940	7940	1707	1707

Source: Caltrans Traffic Operations

Therefore, this document is both a Regional Conformity Analysis and the PM₁₀ Hot Spot study for the project. That is, this includes a resubmittal of the PM₁₀ Hot Spot Qualitative analysis requesting concurrence from FHWA that this is “NOT a Project of Air Quality Concern”. The 2010 PM₁₀ Hot Spot Analysis, is included in Appendix E.

The approved 2008 PM₁₀ SIP and 2013 Amendments has no control measures applicable to the proposed project. Therefore, a written commitment to implement control measures is not required.

The NEPA document for this project does not identify specific mitigation, minimization, or avoidance measures for PM₁₀. A written commitment to implement such control measures is therefore not required.

The Olancha-Cartago 4-Lane Project will be under construction for less than five years (approximately 2 years) in one general location. Therefore, construction related emissions do not apply for the PM₁₀ Hot Spot.

Appendix A. Public Review Comments and Responses Related to Air Quality Conformity

Public Review for this document is currently ongoing.

Appendix B. Additional Documentation Related to Regional Conformity

Isolated Rural Area Regional Emissions Analysis

A regional emissions analysis was conducted for the for the Olancha-Cartago project that is located in an isolated rural area. Because

Pursuant to 40 CFR§93.110 (Latest Planning Assumptions and 93.111 (Latest Emissions Model) are not applicable because on-road emissions were found to not be a significant contributor to PM₁₀ (see Figure 4.1 (attached) and 2008 SIP chapter 4.2). The primary source of PM₁₀ pollution in the Owen Lake Area is Owens Lake, owned by the Los Angeles Department of Water and Power.

Monitoring and research conducted by the GBUAPCD conducted for more than 20 years, as well as three previous State Implementation Plans (SIPs), has determined that wind-blown dust from the dry bed of Owens Lake is the dominant cause of NAAQS violations for PM₁₀ in the non-attainment area. (2008 SIP, Chap 3.1)

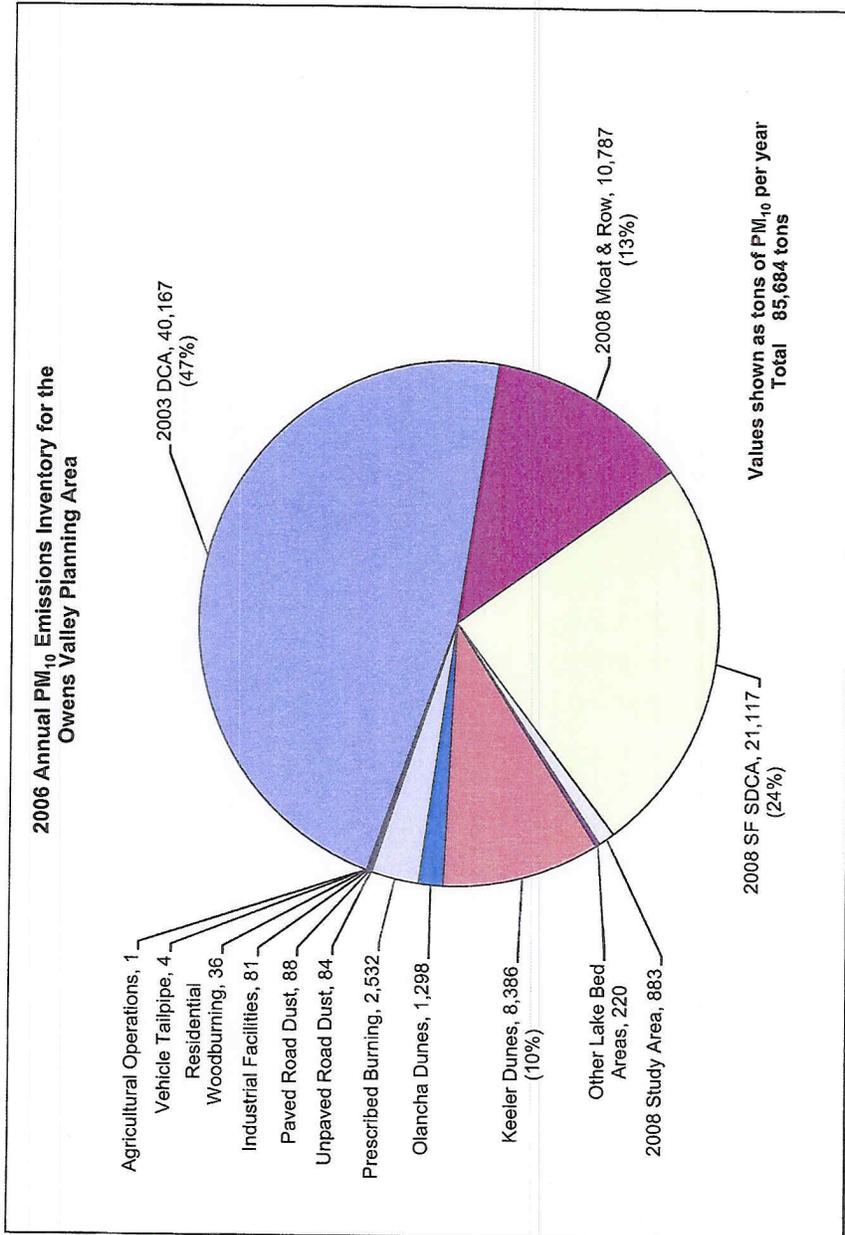


Figure 4.1 – 2006 annual PM₁₀ emissions inventory for the Owens Valley Planning Area

Road Construction Emissions Model, Version 7.1.4

Emission Estimates for -> Olancha Cartago											
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	5.8	28.7	69.3	202.9	202.9	2.9	200.0	44.1	2.5	41.6	9,008.8
Grading/Excavation	15.5	77.5	191.2	207.3	207.3	7.3	200.0	48.0	6.4	41.6	28,257.0
Drainage/Utilities/Sub-Grade	7.4	43.3	75.6	203.9	203.9	3.9	200.0	45.2	3.6	41.6	9,256.5
Paving	22.2	129.6	179.4	9.8	9.8	9.8	-	9.0	9.0	-	22,180.5
Maximum (pounds/day)	22.2	129.6	191.2	207.3	207.3	9.8	200.0	48.0	9.0	41.6	28,257.0
Total (tons/construction project)	3.9	21.4	39.5	50.2	50.2	1.8	48.4	11.7	1.6	10.1	5,342.9

Notes:

- Project Start Year -> 2017
- Project Length (months) -> 24
- Total Project Area (acres) -> 270
- Maximum Area Disturbed/Day (acres) -> 20
- Total Soil Imported/Exported (yd³/day) -> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Olancha Cartago											
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)
Grubbing/Land Clearing	2.6	13.0	31.5	92.2	92.2	1.3	90.9	20.1	1.2	18.9	4,094.9
Grading/Excavation	7.1	35.2	86.9	94.2	94.2	3.3	90.9	21.8	2.9	18.9	12,844.1
Drainage/Utilities/Sub-Grade	3.4	19.7	34.4	92.7	92.7	1.8	90.9	20.5	1.6	18.9	4,207.5
Paving	10.1	58.9	81.6	4.5	4.5	4.5	-	4.1	4.1	-	10,073.0
Maximum (kilograms/day)	10.1	58.9	86.9	94.2	94.2	4.5	90.9	21.8	4.1	18.9	12,844.1
Total (megagrams/construction project)	3.5	19.4	35.8	45.5	45.5	1.6	43.9	10.6	1.5	9.1	4,846.2

Notes:

- Project Start Year -> 2017
- Project Length (months) -> 24
- Total Project Area (hectares) -> 109
- Maximum Area Disturbed/Day (hectares) -> 8
- Total Soil Imported/Exported (meters³/day) -> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Appendix D. PM Interagency Consultation

From: [Heckman, Mark A@DOT](mailto:Heckman_Mark_A@DOT)
To: [Zemitis, Cedrik R@DOT](mailto:Zemitis_Cedrik_R@DOT); [Rosander, Gayle J@DOT](mailto:Rosander_Gayle_J@DOT); [Eastman, Rebecca@DOT](mailto:Eastman_Rebecca@DOT)
Cc: [Brady, Mike J@DOT](mailto:Brady_Mike_J@DOT)
Subject: FW: Request to participate in a project level regional analysis conformity determination for Olancha-Cartago Four-Lane project
Date: Friday, September 06, 2013 3:05:02 PM
Attachments: [image001.png](#)
[image002.png](#)

From: Heckman, Mark A@DOT
Sent: Friday, September 06, 2013 3:01 PM
To: Heckman, Mark A@DOT
Subject: Fw: Request to participate in a project level regional analysis conformity determination for Olancha-Cartago Four-Lane project

----- Forwarded by Mark Heckman/D09/Caltrans/CAGov on 09/06/2013 03:01 PM -----

OConnor.Karina@epamail.epa.gov	To	Mark Heckman < mark_heckman@dot.ca.gov >
03/22/2010 04:58 PM	cc	tpedersen@inyocounty.us , tschade@gbuapcd.org , Joseph.Vaughn@dot.gov , mike_brady@dot.ca.gov , dswade@arb.ca.gov
	Subject	Re: Request to participate in a project level regional analysis conformity determination for Olancha-Cartago Four-Lane project

EPA agrees that this is not a project of air quality concern.

-----Mark Heckman <mark_heckman@dot.ca.gov> wrote: -----

To: tpedersen@inyocounty.us, tschade@gbuapcd.org
From: Mark Heckman <mark_heckman@dot.ca.gov>
Date: 03/18/2010 11:46AM
cc: Karina OConnor/R9/USEPA/US@EPA, Joseph.Vaughn@dot.gov
Subject: Request to participate in a project level regional analysis conformity determination for Olancha-Cartago Four-Lane project

Interagency Partners;

Please excuse the repeated emails regarding this, it was suggested that to make this joint determination the most appropriate form would be via email so that those involved could respond easier and with each other as necessary.

This analysis and supporting documents proposes that the Olancha-Cartago 4-Lane be considered NOT a "Project of Air Quality Concern."

I have sent the following attachments in hard copy form to the Inyo County LTC and Great Basin Unified Air Pollution Control

District- you will be receiving them soon.

Ms. O'Connor and Mr. Vaughn, if you would like hardcopies of these documents I will be happy to mail them to you if you provide me your physical addresses.

The following attachments are District 9's analysis that the Olancha-Cartago Four-Lane project is not a project of Air Quality Concern and we are requesting concurrence on this project in an isolated rural PM-10 area.

(See attached file: Olancha Traffic Index.pdf) (See attached file: AADT-VMT 20 year.pdf) (See attached file: GBUAPCD Ch. 4 SIP.pdf) (See attached file: Olancha FHWA letter.pdf)

The identified parties on this joint determination are:
Ted Pedersen- Inyo County Local Transportation Commission:

tpedersen@inyocounty.us

Ted Schade- Great Basin Unified Air Pollution Control District:

tschade@gbuapcd.org

Karina O'Connor- U.S. Environmental Protection Agency:
OConnor.Karina@epamail.epa.gov

Joseph Vaughn- U.S. Federal Highways Administration:
Joseph.Vaughn@dot.gov

If you have further questions or need anything please don't hesitate to call me.

Mark A. Heckman
District 9 Environmental Branch
Office 760-872-0734
CalNet 8-627-0734
Fax: 760-872-0754

[attachment "Olancha Traffic Index.pdf" removed by Karina OConnor/R9/USEPA/US]

[attachment "AADT-VMT 20 year.pdf" removed by Karina OConnor/R9/USEPA/US]

[attachment "GBUAPCD Ch. 4 SIP.pdf" removed by Karina OConnor/R9/USEPA/US]

[attachment "Olancha FHWA letter.pdf" removed by Karina OConnor/R9/USEPA/US]

From: Heckman_Mark_A@DOT
To: Heckman_Mark_A@DOT
Subject: Fw: Olancha-Cartago Four-Lane PM-10 Conformity Analysis
Date: Friday, September 06, 2013 3:07:06 PM

----- Forwarded by Mark Heckman/D09/Caltrans/CAGov on 09/06/2013 03:08 PM -----

From: <Joseph.Vaughn@dot.gov>
To: <mark_heckman@dot.ca.gov>
Date: 03/09/2010 10:18 AM
Subject: cc
RE: Olancha-Cartago Four-Lane PM-10 Conformity Analysis

I would suggest that you email your request to all the interagency partners. You need to do this, as this is a joint determination. We all have to see each others responses. Each agency can not make this determination in a vacuum. In lieu of this, you would have to schedule a conference call with all to discuss. With out doing either of these, I will not be able to respond. Again, I would suggest Terry as an excellent reference.

Good luck-Joseph

Joseph Vaughn
Air Quality Specialist/MFO Coordinator
FHWA, CA Division
(916) 498-5346

-----Original Message-----
From: Mark Heckman [mailto:mark_heckman@dot.ca.gov]
Sent: Tuesday, March 09, 2010 10:08 AM
To: Vaughn, Joseph (FHWA)
Cc: terry.goewert@dot.ca.gov
Subject: RE: Olancha-Cartago Four-Lane PM-10 Conformity Analysis

I appreciate your response; the project is not a POAOC and all the interagency partners are receiving copies of this document (Inyo LTC, GBAPCD, FHWA, and EPA); it doesn't appear that way on this email but the pdf document that contains the analysis lists those that have received this same documentation (the aforementioned agencies).
Thanks for your advise and input.

Mark A. Heckman
District 9 Environmental Branch
Office 760-872-0734
CalNet 8-627-0734
Fax: 760-872-0734

From: <Joseph.Vaughn@dot.gov>
To: <mark_heckman@dot.ca.gov>
Date: 03/09/2010 09:54 AM
Subject: cc
RE: Olancha-Cartago Four-Lane
PM-10 Conformity Analysis

Not sure what you are asking? If you are asking my concurrence on whether or not this a POAQC--you need to ask this of all the interagency partners, not just FHWA. If this is a request for a conformity determination, it is incomplete. If your intent was the first, maybe you could ask Terry Goewert Caltrans, Central Region, for how to proceed with interagency consultation. She is an excellent resource.

Regards-Joseph

Joseph Vaughn
Air Quality Specialist/MPO Coordinator
FHWA, CA Division
(916) 498-5346

-----Original Message-----

From: Mark Heckman [mailto:mark_heckman@dot.ca.gov]
Sent: Tuesday, March 09, 2010 9:40 AM
To: Vaughn, Joseph (FHWA)
Subject: Olancha-Cartago Four-Lane PM-10 Conformity Analysis

Mr. Vaughn:

The following attachments are District 9 Conformity Analysis for PM-10 for the Olancha-Cartago Four-Lane project. Since I didn't have your physical address I'm emailing these documents for your review. If you need a physical copy feel free to send me notification and I will send one to you immediately. If you have any questions, feel free to call me.

(See attached file: Olancha Traffic Index.pdf)(See attached file: AADT-VMT 20 year.pdf)(See attached file: GRUAPCD Ch. 4 STP.pdf)(See attached file: Olancha FHWA letter.pdf)

Mark A. Heckman
District 9 Environmental Branch
Office 760-872-0734
CalNet 8-627-0734
Fax: 760-872-0754

Appendix E. PM Hot-Spot Analysis

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

District 9
500 South Main Street
Bishop, California 93514
PHONE (760) 872-0734
FAX (760) 872-0754
TTY 711 (760) 872-0734



*Flex your power!
Be energy efficient!*

March 1, 2010

Ms. Karina O'Connor
United States Environmental Protection Agency
OConnor.Karina@epamail.epa.gov

Dear Ms. Karina O'Connor :

Subject: Consultation on PM-10 Hot-spot Conformity Assessment

Project: Olancha-Cartago Four-Lane Project

The Department of Transportation (Caltrans) is providing this PM-10 Hot-spot Conformity assessment for the OLANCHA/CARTAGO FOUR-LANE Project for interagency consultation. It is requested that the Interagency Consultation Partners concur that this project is not a "Project of Air Quality Concern" (POAQC). We would like comments on our assessment within 30 days or by April 1, 2010. An interagency conference call will be held upon request.

Project Description: The Federal Highway Administration (FHWA), in cooperation with Caltrans, proposes to upgrade Olancha/Cartago from two lanes to a four-lane highway. The proposed project will improve the Level of Service (LOS), route continuity, ease congestion, and improve the overall operation of the highway.

Alternatives: Five build alternatives and the "no-build" alternative are proposed for evaluation and study, and may include slight variations or selection of portions of different alternatives. Briefly, these are described as follows and available in the map attachment in the following pages.

Alternative 1 (revised description 7-21-08)

This alternative proposes constructing segments of conventional all-paved, conventional divided, and controlled access four-lane divided highway. The project will provide for facility continuity by connecting into the Sage Flat Four-Lane to the south and the Ash Creek Four-Lane to the north.

South End of the project – Sage Flat Four Lane (0.45 miles south of LA aqueduct Bridge # 48-10, post mile (PM) 30.8)

A controlled access four-lane divided highway is proposed. The existing lanes will be used for northbound traffic and new southbound lanes will be constructed to the west separated by a 100 foot median. This segment is the same for Alternatives 1 through 3.

0.6 miles south of Cactus Flat Road (PM 32.1)

A conventional all-paved four-lane highway is proposed. The existing highway will be widened with northbound and southbound lanes separated by a 14 foot paved median.

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Conformity Group
March 1, 2010
Page 2 of 6

1 mile north of State Route (SR) 190 Junction (PM 35.7)

A conventional divided four-lane highway is proposed. The existing highway will be widened to the west with northbound and southbound lanes separated by a 100 foot unpaved median. An at-grade crossing, acceleration, and deceleration lanes will be provided to truck traffic at the Crystal Geyer bottling plant. Access control will be purchased along the western right-of-way.

0.5 miles south of Whitney Street (PM 37.2)

A conventional four-lane highway is proposed. The existing lanes will be used for northbound traffic, and new southbound lanes will be constructed to the west separated by a 14 foot paved median.

0.6 miles north of Whitney Street (PM 38.4)

A controlled access four-lane divided highway is proposed. The existing lanes will be used for northbound traffic and new southbound lanes will be constructed to the east separated by at least a 100 foot median. Lanes will be constructed to avoid existing steel transmission line towers.

2.2 miles north of Whitney Street (PM 40.0)

A controlled access four-lane divided expressway is proposed. The existing lanes will be used for southbound traffic, and new northbound lanes will be constructed to the east separated by at least a 100 foot median.

North End of Project – Join with Ash Creek Four Lane (0.4 miles south of Ash Creek Bridge #48-11) (PM 41.8)

The communities of Olancha and Cartago consist primarily of residential units. Olancha is situated mostly west of 395 and Cartago is mostly east of existing 395. Cartago has a honey warehouse and a water bottling plant just south of the community. Improvements exist on both sides of the current alignment and both communities will have to give up some private land to widen the right-of-way. This alternative will affect the Ranch House Café, which offers little clearance for the widening of four lanes centered on the existing alignment. Construction of the new segment symmetrically about the existing centerline would place the edge of the pavement within 16 feet of the Ranch House Café. Currently, trucks park off the roadway within the unpaved shoulder area. Parking will be greatly affected for these trucks if Alternative 1 is selected.

Alternative 2

This alternative proposes construction of a controlled access four-lane divided expressway with the northbound and southbound lanes separated by at least a 100 foot wide median throughout the project. The project will provide for facility continuity by connecting into the Sage Flat Four-Lane to the south and the Ash Creek Four-Lane to the north.

South End of the Project – Sage Flat Four Lane (0.45 miles south of L.A. Aqueduct Bridge #48-10) (PM 30.8)

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1.1 miles south of Cactus Flat Road (PM 31.6)

New northbound and southbound lanes will be constructed to the east of the existing highway, and the existing highway will be relinquished to Inyo County.

0.2 miles south of the Junction of State Route 190 (PM 34.5)

New northbound and southbound lanes will be constructed to the west of the existing highway. The existing highway will be relinquished to Inyo County.

0.5 miles south of Whitney Street (PM 37.2)

Existing lanes will be used for northbound traffic and new southbound lanes will be constructed to the west.

0.6 miles north of Whitney Street (PM 38.4)

North End of Project – Join with Ash Creek Four Lane at 41.8 (0.4 miles south of Ash Creek Bridge #48-11).

Alternative 2A

This alternative is a variation of Alternative 2 and proposes that the controlled access divided four-lane expressway be constructed to the west of the community of Cartago with the northbound and southbound lanes separated by at least a 100 foot wide median throughout.

South End of the Project – Sage Flat Four Lane (0.45 miles south of LA Aqueduct Bridge #48-10) (PM 30.8)

0.8 mile north of the State Route 190 junction (PM 35.5)

This proposal is to construct the new northbound and southbound lanes to the west of the community of Cartago.

0.8 miles north of Whitney Street (PM 38.6)

North End of Project – Join with Ash Creek Four Lane (0.4 Miles south of Ash Creek Bridge #48-11) (PM 41.8)

Alternative 3

This alternative proposes construction of a controlled access divided four-lane expressway to the west of the community of Olancha with the northbound and southbound lanes separated by at least a 100 foot wide median throughout the project. The project will provide for facility continuity by connecting into the Sage Flat Four-Lane to the south and the Ash Creek Four-Lane to the north. Throughout the project inside shoulder width will be 5 feet and outside will be 10 feet.

South End of the Project – Sage Flat Four Lane (0.45 miles south of LA Aqueduct Bridge #48-10) (PM 30.8)

0.5 miles south of Cactus Flat Road (PM 32.2)

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New northbound and southbound lanes are proposed to be constructed to the west of the community of Olancho, near the L. A. Aqueduct. The junction with SR 190 will be maintained, probably by an extension to the west to connect with the new lanes. A California Transportation Commission (CTC) approved Route Re-designation is likely required if the terminus of SR 190 is altered by Alternative 3. (PDPM Chapter 23, Article 7)

0.6 miles south of Whitney Street (PM 37.2)
North End of Project – Join with Ash Creek Four Lane (0.4 miles south of Ash Creek Bridge #48-11) (PM 41.8)

Alternative 4

South End of the Project – Sage Flat Four Lane (1.5 miles south of LA Aqueduct Bridge #48-10) (PM 29.75)

Alignment 4 will be a new alignment west of the L.A. Aqueduct. A four lane divided expressway with a 100 foot median will be constructed from PM 29.75 to the northern limit of Cartago. North of Cartago the median will be 100 feet or wider so as to thread through existing utilities. Land necessary for right-of-way is almost entirely agency land (BLM, Forest Service, LADWP). A Right-of-Way fence will control access. The new road will traverse west of the current alignment near PM 29.75 and tie in approximately with the old railroad grade. The road will continue north along the west side of the L.A. Aqueduct. At a point just west of Cartago the road will bridge the aqueduct and angle back toward the current alignment. North of PM 38.6, Alternative 4 will become similar to the other alternatives. Access control will be purchased and the route will be designated Expressway. This is a new alignment and will require adoption by the CTC. The new alignment will be denoted as "Controlled Access Highway" by a "Controlled Access Highway Agreement."

All of the existing U.S. 395 within the project construction area may be relinquished to Inyo County or some of it may become part of SR 190. A CTC approved Route Re-designation is likely required if the terminus of SR 190 is altered by the selection of Alternative 3 or Alternative 4.

North End of Project – Join with Ash Creek Four Lane (0.4 miles south of Ash Creek Bridge #48-11) (PM 41.8)

No-Build Alternative

The No-Build Alternative will maintain the current non-standard features and safety concerns that currently exist and would not address the purpose and need for this project.

PM10 Hot-Spot Conformity Assessment:

This project is located in the Great Basin Air Pollution Control District (GBAPCD) in Inyo County, which is classified as maintenance area for PM-10. According to the Environmental Protection Agency (EPA) Transportation Conformity Guidance, PM-10 hot-spot analysis is required for Projects of Air Quality Concern (POAQC) in non-attainment/maintenance areas (40CFR 93.123 (b) (1)). Projects that are exempt or not POAQC do not require hot-spot analysis. This project does not meet the criteria of an exempt project under 40 CFR 93.126. However, Caltrans, as a Project Sponsor, has determined that this project meets the criteria for not a POAQC.

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According to the EPA's Transportation Conformity Guidance (Final Rule), March 10, 2006, the following are the projects that are NOT of Air Quality Concern:

- i) A new or expanded highway project that primarily serves gasoline vehicles;
- ii) Intersection channelization or interchange reconfiguration projects involving turn lanes or other operational improvements;
- iii) A new compressed natural gas bus terminal.

The project is located in a non-attainment/maintenance area for PM-10. The closest monitoring station is located on Olancha-Walker Creek Rd and has registered five violations of the Federal Standard in the last three years (2006-2008).

The National 3-Year Average: 21, 20, and 22 micrograms per cubic meter.

The National Annual Average: 21.0, 21.7, and 22.3 micrograms per cubic meter.

Year	AADT		Truck Volume	
	Build	No-Build	Build	No-Build
2008	5600	5600	1204	1204
2015	6130	6130	1317	1317
2020	6540	6540	1406	1406
2025	6980	6980	1500	1500
2035	7940	7940	1707	1707

Trucks = 21.5%

Source: Caltrans Traffic Operations

The AADT and the truck volume for the build and no-build are well below the threshold in both the opening and the horizon year. There is no reason to believe that this project will cause or contribute to the violation of the PM10 National Ambient Air Quality Standards (NAAQS). (Please see Traffic Index Calculations Memo-attached) Furthermore, twenty years (1990-2010) of data from building 4-Lane expressways on U.S. Route 395 in both Inyo and Mono Counties has shown that AADT and VMT do not increase as a result of these projects. (Please see VMT/AADT graphic)

The GBAPCD Statewide Implementation Plan (SIP) states the following, "The future emissions inventory is NOT expect to grow significantly from the current inventory. Changes to future population and TRAFFIC related emissions are expected to be insignificant in comparison to the wind blown PM-10 from Owens Lake." Furthermore, the SIP states, that other than the Owens Dry Lake...(sic) "there are no sources outside of this control area that have been found to cause, or could reasonably be expected to cause, a violation of the NAAQS for PM10" (Please the attached Chapter 4 of the GBAPCD SIP).

Caltrans has completed this PM-10 assessment and has determined that this project is not a "Project of Air Quality Concern" therefore no further analysis is required.

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