# **Project-Level Conformity Determination Documentation** for

**Traffic Signal Project at Bethel and Almond Avenue** 

**Fresno County** 

Fresno Council of Governments (FCOG), on behalf of the City of Sanger, is providing the final documentation for PM2.5 and PM10 Hot-spot Conformity Assessment for the Traffic Signal Project at Bethel and Almond Avenue located in the City of Sanger, Fresno County.

The proposed project consists of installing a new three-phase traffic signal system at the intersection of Bethel Avenue and Almond Avenue in the City of Sanger. The draft conformity material was posted on FCOG's website (https://www.fresnocog.org/project-level-conformity/) and was available for the public comment period from March 13<sup>th</sup> through March 31<sup>st</sup>, 2025. No comments were received during this public comment period. An interagency consultation (IAC) meeting was scheduled for April 02, from 1:00 - 1:30 pm (PT).

The NEPA document for this project is CE (23 USC 326), and <u>Caltrans and EPA provided concurrence</u> that the project is not of air quality concern (non-POAQC) on April 02, 2025.

The final documentation package consists of the (1) San Joaquin Valley PM hot-spot checklist, (2) slides presented at the IAC meeting, and (3) IAC meeting minutes.

## San Joaquin Valley (SJV) Hot Spot Checklist for Interagency Consultation

The purpose of this form is to provide sufficient information to allow the IAC group to determine the evaluation if a project is exempt, non-exempt, and not POAQC, or non-exempt projects and POAQC (requires a quantitative project-level PM hot spot analysis).

It is the responsibility of the project sponsor to ensure that the form is filled out completely and provides a sufficient level of detail for the interagency consultation (IAC) to make an informed decision on whether or not a project requires further analysis. For example, the IAC group needs to consider the traffic impacts of the project, and thus part of the required information includes no build/build traffic data.

## **STEP 1: PROJECT IDENTIFICATION**

 $<sup>^{\</sup>rm 1}$  FTIP: Federal Transportation Improvement Program; CTIPS: California Transportation Improvement Program System.

|               | ral Action for wappropriate box   |            | ject-Le          | vel P  | M Conformity is                     | Need    | ed                       |   |       |
|---------------|---|------------|------------------|--------|-------------------------------------|---------|--------------------------|---|-------|
|               | Categorical<br>Exclusion<br>(NEPA)  | EA<br>Dra  | or<br>Ift EIS    |        | FONSI or Final<br>EIS               |         | PS&E or<br>Construction  |   | Other |
| a.            | Include the   | e schedu   | led dat          | e of l | Federal Action (i                   | f avail | able):                   |   |       |
| H. NEI        | PA Assignment   | - Project  | Type <i>(</i>    | chec   | k appropriate bo.                   | x)      |                          |   |       |
|               | Exempt  |            | Section<br>Exclu |        | 6 –Categorical                      |         | Section 32<br>Categorica |   |       |
| Ye            | s No  | ite the fe | deral a          | ppro   | d Transportation wal date for the l | -       |                          |   |       |
| j. Gu         | PE/Env  | illing Da  | ics (us i        |        | ENG                                 | I       | ROW                      | ( | CON   |
| Sta           | rt  |            |                  |        |                                     |         |                          |   |       |
| En            | d   |            |                  |        |                                     |         |                          |   |       |
| Informat<br>( | <ul> <li>K. Project Description (Summary, Use Additional Sheets as Needed):</li> <li>Information should include, but is not limited to: <ul> <li>a. Purpose and need of the project.</li> <li>b. Route name, route number, project length, and mile point locations</li> <li>c. Number of current and future lanes (clearly indicate if any lanes are "turn lane only")</li> <li>d. Identify as "Capacity Adding" or "Non-Capacity Adding" project</li> <li>e. Identify intersecting roads that will be impacted.</li> <li>f. Project impact on surrounding land use/ traffic generators (discuss especially effect on diesel traffic)</li> </ul> </li> </ul> |            |                  |        |                                     |         |                          |   |       |
|               |   |            |                  |        |                                     |         |                          |   |       |

 <sup>&</sup>lt;sup>2</sup> EA: Environmental Assessment; EIA: Environmental Impact Assessment; FONSI: Finding of No Significant Impact; PS&E: Planning, Specification and Estimate.
 <sup>3</sup> PE: Preliminary Engineering; ENG: Engineering; ROW: Right-of-Way; CON: Construction

# **STEP 2: EXEMPT PROJECTS**

# **EXEMPT PROJECT**

No PM project-level conformity is required, and no further documentation is needed. **Go to STEP 6**.

Describe Type of Exempt Project:

NOT AN EXEMPT PROJECT. Go to STEP 3.

### **STEP 3: TRAFFIC INFORMATION**

Fill out only relevant traffic information B through G. For example, fill out D and E if the project is an intersection, and fill out F and G if the project is a bus, rail, or intermodal facility/terminal/transfer point. Include additional tables, maps, and other graphical representations of the projects in separate sheets.

|  | A. | Year( | (s) | Selected | d for | the | Pro | oosed | Facili | ity: |
|--|----|-------|-----|----------|-------|-----|-----|-------|--------|------|
|--|----|-------|-----|----------|-------|-----|-----|-------|--------|------|

a. Year(s) selected

|                               | Years Selected |
|-------------------------------|----------------|
| Existing Year                 |                |
| Opening Year                  |                |
| Analysis Year(s) <sup>4</sup> |                |

| b. | Justification | for Selection | of Analysis | Year( | s) | ): |
|----|---------------|---------------|-------------|-------|----|----|
|----|---------------|---------------|-------------|-------|----|----|

B. Opening Year Traffic Information for No Build and Build Scenarios of the Proposed Facility

|  | No Build | Build |
|--|----------|-------|
| Annual Average Daily Traffic (AADT) <sup>5</sup> |          |       |
| Truck AADT                                       |          |       |
| % Trucks <sup>6</sup>                            |          |       |

<sup>&</sup>lt;sup>4</sup> Section 93.116(a) of the conformity rule requires that PM hot-spot analyses consider either the full-time frame of an area's transportation plan or, in an isolated rural nonattainment or maintenance area, the 20-year regional emissions analysis. The project sponsor will need to choose an analysis year within the time frame of the transportation plan during which peak emissions from the project are expected, and new or worsened violations would most likely occur due to cumulative impacts of the project and background concentrations. In some cases, selecting only one analysis year, such as the last year of the transportation plan or the year of project completion, may not be sufficient to satisfy conformity requirements.

<sup>&</sup>lt;sup>5</sup> Combine directional traffic (southbound and northbound).

 $<sup>^6</sup>$  FHWA categorizes vehicles as Light Duty (Class 1-2) with Gross Vehicle Weight Rating (GVWR) < 10,000 lbs, Medium Duty (Class 3-6) with GVWR between 10,001 – 26,000 lbs, and Heavy Duty (Class 7-8) with GVWR > 26,001 lbs.

| Analysis Year Traffic Information<br>Facility                                    | for No Build and Build !    | Scenarios of the Proposed |
|--|-----------------------------|---------------------------|
|  | No Build                    | Build                     |
| Annual Average Daily Traffic   |                             |                           |
| Truck AADT   |                             |                           |
| % Trucks   |                             |                           |
| Opening Year Traffic Information Facility ( <i>If the facility is an interse</i> | ection or interchange)      | -                         |
|  | No Build                    | Build                     |
| Cross Street AADT  |                             |                           |
| Truck AADT   |                             |                           |
| % Trucks   |                             |                           |
| Level-of-Service (LOS)   |                             |                           |
| Control Delay (seconds)  |                             |                           |
| Facility ( <i>If the facility is an interse</i> Cross Street AADT                | No Build                    | Build                     |
|  |                             |                           |
| Truck AADT   |                             |                           |
| % Trucks   |                             |                           |
| Level-of-Service (LOS)   |                             |                           |
| Control Delay (seconds)  |                             |                           |
| Opening Year Traffic Information Facility (If the facility is a bus, rain        | l, or intermodal facility/t | erminal/transfer point)   |
|  | No Build                    | Build                     |
| Number of bus arrivals   |                             |                           |
| Number of bus arrivals that will be diesel buses                                 |                             |                           |
| Fraction (%) of bus arrivals that will be diesel buses                           |                             |                           |

G. Analysis Year Traffic Information for No Build and Build Scenarios of the Proposed Facility (If the facility is a bus, rail, or intermodal facility/terminal/transfer point)

|  | No Build | Build |
|--|----------|-------|
| Number of bus arrivals                           |          |       |
| Number of bus arrivals that will be diesel buses |          |       |
| Fraction (%) of bus arrivals                     |          |       |
| that will be diesel buses                        |          |       |

| H. | Describe Traffic Impacts (if appropriate) <sup>7</sup>                                  |
|----|---|
|    |   |
|    |   |
|    |   |
|    |   |
|    |   |
|    |   |
| I. | Describe potential traffic redistribution effects of congestion relief (impact on other |
| 1. | facilities)   |
|    |   |
|    |   |
|    |   |
|    |   |

J. Is additional traffic information (tables, maps, and other graphical representations of the project (location, project details on additional lanes or ramps) presented in additional sheets at the end of the checklist?:

Yes No

 $<sup>^7</sup>$  Provide any justification if build % traffic > no-build, large changes in AADT and trucks % even if it is below EPA's criteria, etc.

## **STEP 4: POAQC DETERMINATION**

**NOT PROJECT OF AIR QUALITY CONCERN**<sup>8</sup>. Quantitate analysis is NOT required. IAC review, public participation, and concurrence are required. Provide the filled-out checklist to your MPO for the next steps<sup>9</sup>. Use the space to provide a detailed narrative and rationale for this conclusion.

Go to STEP 6.

**PROJECT OF AIR QUALITY CONCERN.** Check the following options to see if your project is one of the following options. If yes, the project could be of local air quality concern and requires quantitative hot-spot analysis based on interagency review.

Examples of POAQC that are covered by 40 CFR 93.123(b)(1)(i) and (ii)

- New or expanded highway projects with a significant number of, or increase in, diesel vehicles (e.g., 125,000 AADT and 10,000 (8%) diesel truck traffic) Note: These metrics are examples and should not be considered as threshold levels.
- Project affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project.
- New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location.
- Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location.
- Projects in or affecting locations, areas, or categories of sites that are identified in the PM10 and PM2.5 applicable implementation plan or implementation plan submissions, as appropriate, as sites of violation or possible violation.

Examples of POAQC that are covered by 40 CFR 93.123(b)(1)(iii) and (iv)

- A major new bus or intermodal terminal that is considered to be a "regionally significant project" under 40 CFR 93.101.
- An existing bus or intermodal terminal that has a large vehicle fleet where the number of diesel buses increases by 50% or more, as measured by bus arrivals.

<sup>&</sup>lt;sup>8</sup> Refer to EPA's 2021 guidance, EPA-420-B-21-037, and FHWA's FAQ document, for complete details.

<sup>&</sup>lt;sup>9</sup> Listed in Pg. 1 under "Instructions"

## **STEP 5: ANALYSIS AND DOCUMENTATION (for POAQC)**

The following is a summary of documentation to be included for a quantitative PM hot-spot analysis. Please refer to the EPA Quantitative Hot-Spot Guidance for more information. <sup>10</sup> IAC review and concurrence are required on the modeling protocol before the modeling begins. Contact your MPO representative and Air Quality Coordinator for additional guidance.

## **Documentation to Be Included for the Quantitative PM Hot-spot Analysis:**

- Description of project
- Description of type of emissions considered in the analysis.
- Contributing Factors
  - Air Quality
  - Transportation and traffic conditions
  - o Built and natural environment
  - Meteorology, climate and seasonal data
  - Adopted emissions control measures
- Consider the full-time frame of the area's LRTP
- Description of existing conditions
- Description of changes resulting from the project
- Description of models, methods, and assumptions
- Description of analysis years
- o Types of emissions included in the analysis and the details of emissions modeling.
- Results of air dispersion modeling.
- Background concentration estimation methods and results.
- Design value calculation.
- Discussion of why the project will not cause a violation of either the annual or 24hour standard.
- Discussion of any mitigation measures
- Conclusion on how the project meets conformity requirements.
- Documentation of any IAC decisions on the latest planning assumptions used in the analysis.
- Documentation of any public comment on the latest planning assumptions used in the analysis.

<sup>&</sup>lt;sup>10</sup> See EPA Quantitative PM Hotspot Analysis Guidance, EPA-420-B-21-037, October 2021; Accessed at <a href="https://www.epa.gov/state-and-local-transportation/project-level-conformity-and-hot-spot-analyses#pmguidance">https://www.epa.gov/state-and-local-transportation/project-level-conformity-and-hot-spot-analyses#pmguidance</a>

# STEP 6: PUBLIC AND IAC INVOLVEMENT

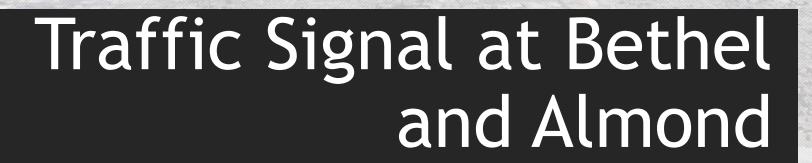
Fill out this section after the checklist is sent to the MPO and the project is presented at the SJV Project Level Conformity Group Meeting.

| A. | SJV Project Level Conformity Group Meeting Date:   |
|----|--|
| B. | Summary of IAC comments received and responses:    |
|    |  |
| C. | Summary of public comments received and responses: |
|    |  |
| D. | IAC Concurrence Date(s):                           |

## **Additional Information on Traffic Data**

Attach traffic data tables, maps, and other graphical representations of the project to supplement information in Step 3.

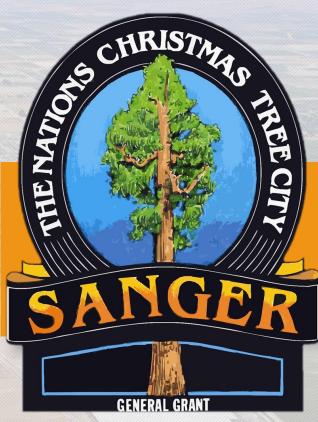




City of Sanger

Federal Project Number: CML-5197(043)

FTIP: LSTMP839







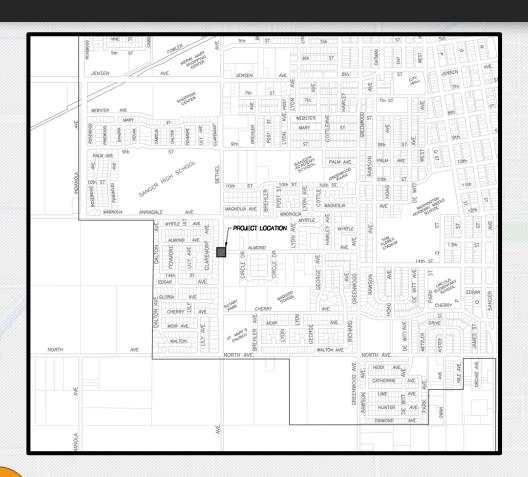
- Project Description
- Project Location
- Purpose and Need
- Project Listing in the FTIP/CTIPS
- Traffic Data
- Project Schedule
- Project-level Conformity Summary



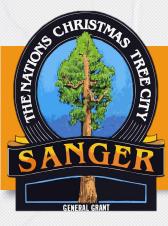


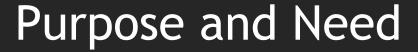
- At the intersection of Bethel Ave and Almond Ave; Install a new three-phase traffic signal system.
- Currently, there are high traffic volumes on Bethel Avenue at Almond Avenue, resulting in long queue times for the intersection.
- Installing a new traffic signal at the intersection improves the level of service, reduces queues and idling time at the intersection, and provides safety improvements for pedestrians to cross to the intersection.
- Project consists of a No-Build (no signal improvements) and One Build Scenario (with signal improvements)
- Project does not meet the criteria for an exempt project under 40 CFR 93.126 or 93.128.

# Location











# Need

- Currently there are high traffic volumes on Bethel Avenue at Almond Avenue, due to its location Sanger High School, resulting in long queue times for east and west legs trying to get onto Bethel Avenue.
- Existing Level of Service (2025) LOS F during AM Peak Hour and LOS F during the PM Peak Hour and existing Delay
   696 seconds and 82 seconds during AM and PM peak hours
- A secondary benefit would provide an enhancement for pedestrians to safely cross the road. There was a recent fatal accident with a motorist and pedestrian attempting to cross Bethel Avenue.

# **Purpose**

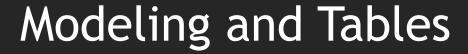
- Installation of a new traffic signal at the intersection of Bethel Avenue and Almond Avenue.
- Installing the traffic signal system will not only significantly reduce delay and increase the level of service but also bring much-needed safety improvements for pedestrians crossing east-west on Bethel Avenue where it is currently uncontrolled.
- New level of service (LOS) based on existing peak hours (with signal improvements in 2025) LOS C during the AM peak hour and LOS B in the PM peak hour and new delay (with signal improvements) 29.9 seconds and 13.1 second during AM and PM peak hours





- The proposed project (FTIP ID: LSTMP839) is listed in the 2025 Fresno Transportation Improvement Program.
- The scope of the proposed project is consistent with the project description in the 2025 FTIP.

| Citoria, City Or | 20-00 | 11XE100000 | COTHIC TET | Legition patron   |   | Local | 910     | 6770    | 40    | 90  | 40  | 90      | 4100    | ψ1,0 Y  |
|------------------|-------|------------|------------|---|---|-------|---------|---------|-------|-----|-----|---------|---------|---------|
|                  |       |            |            |   | Intersection of Fowler Ave and Olive Ave; traffic signal installation<br>adding left turn lanes and roadway improvements to reduce<br>emissions, dust mitigation, VOC, PM10, and PM2.5 caused by<br>congestion at the intersection by addressing the severe delay times | CMAQ  | \$3,231 | \$0     | \$0   | \$0 | \$0 | \$0     | \$3,231 |         |
| Fresno County    | 25-00 | FRE190006  | LSTMP623   | Fowler and Olive Traffic Signal   |   | Local | \$995   | S0      | \$0   | \$0 | \$0 | so      | \$995   | \$4,226 |
|                  |       |            |            |   | ,   | STBG  | \$354   | \$0     | \$0   | \$0 | \$0 | \$0     | \$354   | 4 1,122 |
| Fresno County    | 25-00 | FRE190006  | LSTMP851   | Millerton / Marina Intersection<br>Improvements                               | At the intersection of Millerton Road and Marina Drive; Install traffic signal and other related intersection improvements  | Local | \$96    | \$3,000 | \$0   | \$0 | \$0 | so      | \$3,096 | \$3,450 |
|                  |       |            |            |   |   | CMAQ  | \$75    | \$441   | \$0   | \$0 | \$0 | \$0     | \$516   |         |
| Sanger City of   | 25-00 | FRE190006  | LSTMP805   | Jensen and Indianola Traffic Signal   | At the intersection of Jensen Ave and Indianola Ave; Install new three-<br>phase traffic signal system  | Local | \$10    | \$57    | \$0   | \$0 | \$0 | so      | \$67    | \$583   |
|                  |       |            |            |   |   | CMAQ  | \$39    | \$235   | \$0   | \$0 | \$0 | \$0     | \$274   |         |
| Sanger, City of  | 25-00 | FRE190006  | LSTMP839   | Bethel and Almond Traffic Signal  | Bethel Ave at Almond Ave; Install new three-phase traffic signal<br>system  | Local | \$5     | \$267   | \$0   | ŝo  | \$0 | so      | \$272   | \$54    |
|                  |       |            |            |   | Central Ave and Chestnut Ave Intersection Improvements - Install left-  | CRP   | \$0     | \$0     | \$149 | \$0 | \$0 | \$0     | \$149   |         |
| Fresno County    | 25-00 | FRE190006  | LSTMP891   | Central Ave & Chestnut Ave Left-Turn<br>Phasing and Intersection Improvements | turn signals in all four directions; add right turn lanes on the west,<br>south and east legs of the intersection; replace ADA curbs ramps and<br>curb & gutter.  | Local | \$0     | \$0     | \$19  | \$0 | \$0 | \$1,135 | \$1,154 | \$1,303 |
| Selma, City of   | 25-00 | FRE190006  | LSTMP735   | McCall & Dinuba Traffic Signal  | At the intersection of McCall and Dinuba; Install traffic signal (TC)   | CMAQ  | \$198   | so      | \$749 | \$0 | \$0 | \$0     | \$947   | \$947   |





|             | 2025<br>(NO-BUILD) | 2025<br>(BUILD) | 2046 AADT<br>(NO-BUILD) | 2046 AADT<br>(BUILD)                             |
|-------------|--------------------|-----------------|-------------------------|--|
| AADT        | 6572               | 6572            | 15662                   | 15662  |
| % Trucks    | 18%                | 18%             | 34%                     | 34%  |
| Truck AADT  | 1168               | 1168            | 5283                    | 5283   |
| LOS & Delay |                    |                 |                         | AM - F (341.3 Seconds)<br>PM - F (126.7 Seconds) |

- AADT for 2025 and 2046 future years is the same for no-build and build.
- Y&H coordinated with Fresno COG and COG provided traffic date from their travel demand model. Y&H then applied the incremental method to traffic counts conducted to get forecasted traffic and determine the level of service of the intersection for both 2025 and 2046 with and without signal improvements.





|       | Preliminary<br>Engineering | Engineering | Right-of-Way | Construction |
|-------|----------------------------|-------------|--------------|--------------|
| Start | 2022                       |             |              | 2025         |

# Project-level Conformity Conclusion



- Project does not meet the criteria for a POAQC as defined in the final rule by 40 CFR 93.123(b)(1). The project is listed as one of the non-exempt project examples that are not a local air quality concern under 40 CFR 93.123(b)(1)(i) and (ii) stated as
  - "Intersection channelization projects, traffic circles or roundabouts, intersection signalization projects at individual intersections, and interchange reconfiguration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling. Thus, they would be expected to have a neutral or positive influence on PM emissions"
- Additional reasons why the project is not a POAQC are:
  - > Project will significantly improve the LOS of the intersection
  - > Queues and idling times will be significantly reduced and in turn will reduce emissions
  - The project is not developer driven and will not generate any additional trips. The traffic volumes between the build and no-build scenarios is the same for both 2025 and 2046. The additional traffic in 2046 is due to natural growth of the area and there is no correlation between additional traffic and this project.





# **Contact Information**

Josh Rogers

City of Sanger

559-244-3123



# San Joaquin Valley Project-Level Conformity Working Group

## **Project-Level Conformity Determination for**

Traffic Signal at Bethel Avenue and Almond Avenue, City of Sanger, Fresno County

**Meeting Minutes** Wednesday, April 02, 2025, 1:00 – 1:30 pm The meeting was held via Zoom teleconference.

#### **Attendees**

SJV AQ Coordinator (Trinity Consultants): Suriya Vallamsundar City of Sanger and Project Team: Josh Rogers, Aaron Martinez

FCOG: Matthew Shimizu, Kai Han

KernCOG: Vincent Liu KCAG: Kayley Clay MCTC: Evelyn Espinosa

MCAG: Stacie Guzman, Meg Prince, Christopher Winkels

Caltrans HQ: Rodney Tavitas, Karishma Becha, Nicole Lewis, Kien Le, Erika Vaca

Caltrans District 6: Ken Romero Caltrans District 10: Sriram Iver **EPA: Lindsay Wickersham** FHWA: Gilberto Contreras

## **Meeting Summary**

Introductions

Commencing the meeting, AO Coordinator provided opening remarks and conducted a call to establish the attendance of all participants.

- Review of Non-Exempt Projects for the Project-level Particulate Matter (PM) Conformity
  - o Introductions and Project Overview: The AQ Coordinator introduced the Traffic Signal at Bethel Avenue and Almond Avenue, located in the City of Sanger
  - o Project Presentation: The City of Sanger project team presented the project details and the reasoning behind the proposed project-level conformity determination.
  - Public Comment Period: FCOG informed the group that all project-level materials were available for public review on the COG website from March 13 - March 31, 2025. No comments were received during this public comment period.

### Discussion

Caltrans inquired if the project was funded by the Highway Safety Improvement Program (HSIP). The project team replied that it was not, as relevant collision history data was unavailable when the project was programmed.

### Determination

EPA and Caltrans concurred that the project is not a project of air quality concern (POAQC).















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Closing Remarks and Adjournment

AQ Coordinator informed the group that the final hot spot materials and meeting minutes will be posted to the FCOG website. FCOG will then send a final email to IAC, documenting the concurrences received.













