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Hillary Gitelman
Director

To: the Napa County Conservation, Development, and Planning Commission

From: Chris Cahill, Project Planner *CC*

Date: July 13, 2010

Regarding: Response to Comments on Napa 34 Commerce Center (*Proposed*)
Use Permit Application № P09-00329 & Tentative Parcel Map Application № P09-00330
State Clearinghouse № 2010032066, APN 057-210-056

Introduction

This memorandum has been prepared by County staff to respond to comments received by the Napa County Conservation, Development, and Planning Department (Napa County) on the March 22, 2010 initial hearing proposed Initial Study/Mitigated Negative Declaration (IS/MND) for the Napa 34 Commerce Center Use Permit Application № P09-00329 and Tentative Parcel Map Application № P09-00330 (project). The initial project mitigated negative declaration was circulated for public review from March 22, 2010 through April 20, 2010. Based on comments received during the initial comment period, the County of Napa determined that revisions to and recirculation of the document were necessary. A revised recirculated IS/MND was finalized and circulated for public review from June 21, 2010 through July 20, 2010.

This memorandum for the project presents the name of the persons and/or organizations commenting on the Proposed IS/MND and responses to comments; in combination with the revised recirculated IS/MND it completes the Final IS/MND.

CEQA Process

In accordance with Section 15073 of the CEQA Guidelines, Napa County submitted the initial proposed IS/MND to the State Clearinghouse for a 30-day public review period beginning on March 22, 2010. In addition, Napa County circulated a Notice of Intent to Adopt the initial hearing proposed IS/MND to interested agencies and individuals. During, and directly following, the initial public review period, Napa County received five comment letters. Table 1 below lists the entities that submitted comments on the proposed IS/MND. The comment letters are also attached.

TABLE 1

Persons Commenting on the Draft IS/MND

| Comments Received from | Dated |
|--|----------------|
| Department of Fish and Game | April 15, 2010 |
| John Stephens | April 19, 2010 |
| Richard Drury for Carpenters Local 751 | April 20, 2010 |
| Caltrans | April 21, 2010 |
| Living Rivers Council | May 17, 2010 |

In accordance with CEQA Guidelines Section 15074(b), Napa County considers the Proposed IS/MND together with comments received, both during the public review process and before action on the project, prior to adopting the revised recirculated IS/MND and rendering a decision on the project. The CEQA Guidelines do not require the preparation of a response to comments for negative declarations; however, this memorandum responds to comments received. Based on comments received during the initial comment period, the County of Napa determined that revisions to and recirculation of the draft IS/MND were necessary; with those revisions and the additional mitigation measures incorporated into the project and addressed in the recirculated document, Napa County finds that, as mitigated, the project would not have a significant effect on the environment.

Responses to CommentsComment № 1 - Department of Fish and Game

Response to Comment 1.1: The commenter identifies potential impacts to Falconiformes and Strigiformes and requests pre-construction nesting surveys. Mitigation measure № 5, at page 22 of the revised recirculated IS/MND (copied below) requires preconstruction/pregrading raptor surveys, consultation with the Department of Fish and Game, and the creation of sufficient buffer areas in the event that nesting raptors are found.

To avoid potential losses to nesting raptors, migratory birds protected under the Migratory Bird Treaty Act, and special status bird species, construction activities shall occur outside the critical breeding period from March through August. If construction is proposed to occur during the breeding period, the site shall be surveyed for active nests by a qualified Biologist no more than 30 days prior to commencing construction activities. If active nests are found, the nest location and a buffer area designated by the biologist in consultation with the California Department of Fish and Game shall be established, and those areas shall be avoided until the nest has been vacated. If no nests are found on or adjacent to the project site, tree removal could proceed without further survey.

Response to Comment 1.2: The commenter identifies potential impacts to burrowing owls and requests specific additional mitigation regarding burrowing owl surveys, buffer areas, and offsets for potential foraging habitat losses. The commenter's requested mitigations have been incorporated in their entirety into mitigation measure № 6, at page 23 of the revised recirculated IS/MND (copied below).

To avoid potential losses to the Western Burrowing owl, a nesting survey shall be conducted by a qualified Biologist no more than 30 days prior to commencing construction activities. If active nests are found, a nest location and a buffer area shall be designated by the biologist in consultation with the California Department of Fish and Game.. Buffers shall be maintained around any active nests and burrows at all times of the year. A site specific proposal for surveys shall be submitted for the review and approval of the Department of Fish and Game prior to implementation. Surveys shall additionally comply with requirements 1-7 at pages 2 and 3 of the Department of Fish and Game's comment letter of April 15, 2010. If no nests are found on the project site construction activities could proceed without further survey.

Response to Comment 1.3: The commenter identifies potential impacts to Swainson's hawk and requests specific additional mitigation regarding offsets for potential foraging habitat losses. The commenter's requested mitigation, requiring a .75 to 1 foraging habitat offset, has been incorporated into mitigation measure № 7, at page 23 of the revised recirculated IS/MND and is copied below.

In order to mitigate for the loss of Swainson's hawk foraging habitat, prior to the issuance of a building or grading permit, the project proponents shall either provide 0.75 acres of land for each acre of urban development authorized by this project as permanent protected Swainson's hawk foraging habitat (lands shall be protected in perpetuity and should provide for the long-term management of the lands by funding a management endowment) or other mitigation as deemed acceptable by the California Department of Fish and Game.

Response to Comment 1.4: The commenter states that impacts to drainages will be subject to a Section 1600 Lake and Streambed Alteration Agreement. Mitigation measure № 9, at page 24 of the revised recirculated IS/MND requires that "Prior to issuance of a building or grading permit, the project proponent shall provide documentation from the California Department of Fish and Game that a 1602 permit has been issued or that said department does not deem such permitting necessary. The terms and conditions of that permitting are subject to Fish and Game concurrence and may be modified as deemed necessary by that department."

Comment № 2 - John Stephens

Response to Comment 2.1: The commenter states that Caltrans-sponsored environmental studies have indicated the existence of California Red Legged Frog (CRLF) in on-site wetlands. Citing the submitted Monk and Associated CRLF assessment report (*California Red-Legged Frog Site Assessment – Napa Commerce Center Project Site, Napa County, California*, Sarah Lynch for Monk & Associates, May 29, 2009) staff concludes that the two closest CRLF records are not mapped within the same watershed

and that there is no evidence in the record to indicate the existence of CRLF in project-area wetlands. For additional reference, please see page 20 of the revised recirculated IS/MND.

Response to Comment 2.2: The commenter correctly states that final CRLF and Vernal Pool Fairy Shrimp (VPFS) studies were not available at the time of initial circulation of the draft IS/MND. Those studies have now been finalized, were submitted on April 20, 2010, are part of the record, and were made available during the public review period for the revised recirculated IS/MND. As analyzed at pages 18-21 of the revised recirculated IS/MND, no CRLF or VPFS were found on site and impacts to those two special-status species will be less than significant.

Comment № 3 - Richard Drury, Esq. for Carpenters Local 751

Response to Comment 3.1: The commenter states that experts have identified significant environmental impacts not mitigated to less-than-significant levels by the March 22, 2010 proposed IS/MND and that an Environmental Impact Report (EIR) is therefore necessary. As noted at items 3.6-3.19, below, all items raised in the commenter's April 20, 2010 letter have been addressed and found to result in less-than-significant impacts as analyzed in and/or mitigated by the June 21, 2010 revised recirculated IS/MND. An EIR is not necessary for this project.

Response to Comment 3.2: The commenter states, in somewhat greater detail than at comment 3.1, that experts have identified significant environmental impacts not mitigated to less-than-significant levels. Please see items 3.6-3.19, below, for Napa County's response(s).

Response to Comment 3.3: The commenter argues that his client, Mr. Dan Digardi and the members of Carpenters Local 751, have standing to challenge the adequacy of the March 22, 2010 initial hearing draft proposed IS/MND. This is not a comment related to the environmental impacts of the project.

Response to Comment 3.4: The commenter states that an EIR is required where there is a "fair argument" supported by expert evidence that a project may have adverse environmental impacts. Napa County shares the commenter's understanding of the "fair argument" legal standard and of the role of expert opinion in determining whether or not a "fair argument" exists in any given case. It is, however, Napa County's position that all items addressed in the commenter's April 20, 2010 letter will result in less-than-significant impacts as analyzed in and/or mitigated by the June 21, 2010 revised recirculated IS/MND. Additionally, the commenter has stated that with the mitigations incorporated into the revised recirculated IS/MND (see, for reference, Richard Drury's letter of May 23, 2010, which is Attachment F in the revised recirculated IS/MND) an EIR is unnecessary.

Response to Comment 3.5: The commenter states that, based on the March 22, 2010 draft proposed IS/MND, a "fair argument" supported by expert evidence existed that the Napa 34 project may have had adverse environmental impacts. Based on comments received during the initial comment period, the County of Napa determined that revisions to and recirculation of the document were necessary; with those revisions and the additional mitigation measures incorporated into the

project and addressed in the June 21, 2010 revised recirculated IS/MND, Napa County and the commenter concur that the project would not have a significant effect on the environment.

Response to Comment 3.6: The commenter states that, based on an analysis completed by Traffic Engineer Tom Brohard, P.E. and attached to the subject comment letter, the analysis of near term traffic conditions included in the March 22, 2010 initial hearing draft proposed IS/MND is flawed. Upon further review and clarification of information, Messrs. Brohard and Drury have concluded that the analysis which comprises their Comment 3.6 is incorrect. Quoting from Mr. Brohard's letter of May 22, 2010 (included in the revised recirculated IS/MND at Attachment F);

Mr. Nickelson indicates traffic volumes have remained the same or decreased slightly over the last three years on SR12 and SR29 adjacent to the Project, and I have verified this on the Caltrans website. Further, I found that the County of Napa does not require factoring of traffic counts to represent conditions on Thursdays in August as does the City of Napa. After considering these items, I agree with the analysis in the Traffic Study that SR12/SR29/Airport Boulevard will operate at LOS "D" with Project traffic added.

In addition, in his letter of May 21, 2010 (also included in the revised recirculated IS/MND at Attachment F) project traffic engineer George Nickelson P.E. states that;

The baseline scenario was established through consultations with Mr. Rick Marshall, the Deputy Director of Public Works for Napa County. This scenario reflects the buildout of the adjacent Greenwood Business Park; the proposed Napa Commerce Center trips were then added to identify the short term traffic impacts. Due to the size of these developments (378,891 sq.ft. in the approved Greenwood Business Park and 490,503 sq.ft. in the proposed Napa Commerce Center project), the traffic generated by these combined developments would represent a very conservative estimate of traffic growth over the next 2-3 years. Our TIA short term baseline scenario is conservative and valid.

With regard to other "Annual Ambient Growth", we assume Mr. Brohard is referring to potential background traffic increases on State Route 29 (SR 29) and SR 12 in the project area. However, Caltrans traffic volume records indicate that volumes on SR 29 and SR 12 have been constant or have actually decreased slightly over the 2006-2009 (the most recent 3 year period for which Caltrans has volume data). There is no evidence that our short term baseline analysis should have included increased traffic volumes on SR 29 or SR 12 – our TIA analysis is appropriate.

With regard to impacts at SR 29/SR 12-Airport Boulevard, our TIA found that when project trips are added to the baseline conditions, this intersection would continue to operate at an acceptable LOS "D". Cumulative buildout mitigation measures are being established (and the appropriate traffic impact fee identified) as a part of the "Update of Airport Industrial Area Traffic Mitigation Fee Program" (see section 3 of this letter).

County staff, George Nickelson, and Tom Brohard represent the entire cadre of expert commentators on the subject of near term traffic levels in and around the Napa 34 Commerce Center project area and all are now in agreement that, for the reasons noted above, the addition of project traffic to baseline

traffic volumes in the project area will not result in a significant environmental impact. As a result, an EIR is not necessary.

Response to Comment 3.7: The commenter states that, "Table 5 on page 13 of the (Nickelson) Traffic Study indicates delay at Airport Boulevard/SR29/SR12 in the AM peak hour will increase from 41.4 seconds to 53.6 seconds... (and that) with the upper threshold of LOS D at 55.0 seconds, there is at least a "fair argument" that the adjustments above (as discussed at **Comment 3.6**) will result in LOS E conditions." As noted above, Messrs. Brohard and Nickelson have reached agreement that the baseline analysis utilized in the project Traffic Study is correct. The resulting 53.6 second delay time modeled by Mr. Nickelson is quantifiably below the 55.0 second LOS E threshold. As analyzed in the June 21, 2010 revised recirculated IS/MND, impacts related to traffic delay at Airport Boulevard/SR29/SR12 in the AM peak hour will be less than significant.

Response to Comment 3.8: The commenter states that the proposed driveway throats on-site are very short and will not accommodate the 95th% queues of traffic exiting the driveways during the PM peak hour. Quoting from George Nickelson's May 21 response to comments letter;

Our TIA provided Level of Service (LOS) and operations calculations for each of the four project driveways (three on Devlin Road and one on Airport Boulevard). As outlined in our report (Table 5, page 13, all of the driveways outbound traffic would operate at LOS "C" or better. This would be considered very acceptable urban peak hour conditions.

With regard to queuing, our TIA also provided 95th percentile vehicle queue calculations for each driveway (Table 6, page 18 of the TIA). The following compares the queue lengths with the distance between the adjacent roadway travel lane and the internal parking aisle:

- Devlin Road north driveway; 50 foot queue/55 foot distance
- Devlin Road center driveway; 65 foot queue/60 foot distance
- Devlin Road south driveway; 49 foot queue/70 foot distance
- Airport Boulevard driveway; 62 foot queue/65 foot distance

As this comparison indicates, at three of the project driveways, the calculated 95th percentile queue for vehicles exiting the project would not back up beyond the nearest internal parking aisle. Even at the project's Devlin Road center driveway, the calculated queue would be approximately equal to the available distance between the travel lane and the internal parking aisle. There is no evidence that the driveway queuing would significantly impact internal circulation. Similarly, based on the traffic circulation analysis, there is no reason to conclude that the driveways' operation would impact traffic flows on the adjacent streets.

In his letter of May 22, Tom Brohard concurs;

In regard to on-site queuing, I had previously indicated the 95th percentile queues in the Traffic Study appeared to exceed the available distances that I had scaled from the reduced site plan. Mr. Nickelson has measured the distances from a scaled drawing of the site, and I agree that the distances provided are adequate.

Based on the revised recirculated IS/MND and the above-cited expert analyses, impacts related to traffic queuing at driveway throats will be less than significant.

Response to Comment 3.9: The commenter states that the proposed IS/MND fails to include an analysis of cumulative traffic impacts and that, as a result, it is inadequate to determine whether or not significant cumulative traffic impacts exist.

The scope of the Nickelson/OmniMeans project traffic impact analysis was established in consultation with Rick Marshall, Napa County's lead transportation engineer and Deputy Director of the Department of Public Works. Consistent with guidance provided by Mr. Marshall in his capacity as chief traffic engineer, the project traffic impact analysis relied on the cumulative buildout traffic findings included in the County's ongoing *Update of Airport Industrial Area Traffic Mitigation Fee Program*. The Airport Industrial Area, in which the Napa 34 Commerce Center project is located, is currently subject to an adopted and County-mandated cumulative traffic impact mitigation fee program which is designed to provide funding for the planning and construction of local and regional transportation improvements within and adjacent to the Napa County Airport Industrial Area in anticipation of the development of, amongst others, the projects mentioned in the revised recirculated IS/MND. The current fee is \$3,551 per PM peak hour trip. The County is in the process of updating the fee and is engaging in a thoroughgoing analysis of short, mid, and long-term cumulative traffic modeling as a component of that study. The *Update of Airport Industrial Area Traffic Mitigation Fee Program* considers and incorporates all approved and pending projects, specifically including Napa Pipe, in its cumulative impact scenarios. The *Update* analyzes complete buildout of the Airport Industrial Area, cumulative development outside of the Airport Industrial Area, and long term predicted regional traffic growth on nearby state highways.

As noted above, the Napa Pipe project has been included in the cumulative impact scenarios driving the *Update of Airport Industrial Area Traffic Mitigation Fee Program*. Despite the fact that Tom Brohard initially raised concerns about a lack of consistency between Napa 34 Commerce Center's cumulative impact mitigations and those of the Napa Pipe project Draft Environmental Impact Report (DEIR) (available for review in the offices of the Napa County Department of Conservation, Development, and Planning), in his subsequent letter of May 17, 2010 Mr. Brohard finds that;

The (project) Traffic Study indicates the County of Napa did not require an analysis of cumulative conditions as an area-wide traffic study to accomplish this task and to update the County of Napa Traffic Impact Fee Program is nearly complete. In my telephone discussion on May 12, 2010, George Nickelson indicated an administrative draft of cumulative traffic conditions and the corresponding update of the Traffic Impact Fee Program was now being reviewed by County staff. From his experience in the area, Mr. Nickelson indicated the current fee of \$3,551 per PM peak hour trip will likely increase when the update is adopted. ... Assuming that the County of Napa continues all of the various components of their overall Traffic Impact Fee Program as they have historically done, it appears that the Napa 34 Holdings Commerce Center Project will be required to pay their "fair share" of the regional roadway improvements needed to mitigate the cumulative impacts of all projects in the area.

In addition, in his letter of May 22, 2010, Mr. Brohard confirms his (correct) understanding that “the study of cumulative traffic conditions, including Napa Pipe, was nearing completion, together with updating of the current traffic impact fee.” Speaking directly to Napa Pipe and the conformity of the Napa 34 Commerce Center project, the *Update of Airport Industrial Area Traffic Mitigation Fee Program*, and Napa Pipe, George Nickelson’s May 21, 2010 memo finds that, “there will ultimately be a consistent set of mitigation measures that address impacts associated with the Airport Industrial Area” and Napa Pipe.

With a combination of the project-specific mitigations and a mitigation measure requiring payment of the project’s “fair share” of traffic improvements as required by the revised recirculated IS/MND and analyzed in the cumulative traffic impact analysis incorporated into the final adopted *Update of Airport Industrial Area Traffic Mitigation Fee Program*, there will be no individually or cumulatively significant traffic impacts associated with this project as regards traffic congestion and levels of service. All cumulative traffic impacts will be mitigated to a less than significant level by payment of the traffic impact fee.

Response to Comment 3.10: The commenter argues that the mitigation measures included in the March 22, 2010 proposed IS/MND are incomplete in specific instances as described below. Napa County’s specific responses follow, however, in sum, as analyzed in the June 21, 2010 revised recirculated IS/MND, mitigation measures incorporated into that document are adequate to reduce all traffic impacts to a less-than-significant level.

- a.) *Mitigation Measure #10 – Pay Traffic Mitigation Fees:* The commenter argues that the mitigation measure requiring payment of the County’s traffic impact mitigation fees will not result in the project paying its “fair share” for needed long term regional transportation improvements. Napa County disagrees; the County’s current and/or updated Airport Industrial Area traffic impact fee program will result in the project paying its “fair share” towards know cumulative and project-specific traffic impacts. See also response to **Comment 3.9.**

In his May 17, 2010 letter, Tom Brohard, whose technical memo of April provided the basis for the commenter’s original statements, indicates that upon further review and based on additional information provided by George Nickelson, he is convinced that the County’s traffic mitigation fee will result in the project covering its “fair share” of traffic impacts. Quoting from that letter;

Update of Traffic Impact Fee Program – The Traffic Study indicates the County of Napa did not require an analysis of cumulative conditions as an area-wide traffic study to accomplish this task and to update the County of Napa Traffic Impact Fee Program is nearly complete. In my telephone discussion on May 12, 2010, George Nickelson indicated an administrative draft of cumulative traffic conditions and the corresponding update of the Traffic Impact Fee Program was now being reviewed by County staff. From his experience in the area, Mr. Nickelson indicated the current fee of \$3,551 per PM peak hour trip will likely increase when the update is adopted.

At the current fee, the Napa 34 Holdings Commerce Center Project would pay nearly \$1.5 million (422 PM peak hour trips times \$3,551 equals \$1,498,522) for mitigation of its cumulative traffic impacts. Assuming that the County of Napa continues all of the various components of their overall Traffic Impact Fee Program as they have historically done, it appears that the Napa 34 Holdings Commerce Center Project will be required to pay their “fair share” of the regional roadway improvements needed to mitigate the cumulative traffic impacts of all projects in the area.

- b.) *Mitigation Measure #12 – Airport Boulevard/Devlin Road Improvements:* The commenter states that the “improvements identified at page 21 of the Traffic Study require the widening of Airport Boulevard... (and) could result in the need for additional right-of-way.” Napa County concurs that the project site plan has, from as early as the beginning of the public comment period for the proposed IS/MND, shown all land area necessary for the widening of Airport Boulevard debited from the Napa 34 parcel. The applicant has agreed to mitigation measures requiring the dedication of the subject parcel area and all environmental impacts associated with its conversion to right-of-way have been analyzed and found less-than-significant as mitigated in the revised recirculated IS/MND.
- c.) *Mitigation Measure #13 – Soscol Ferry Road/Devlin Road Traffic Signal:* The commenter states that the “project’s fair share of signalization should be calculated and the funds collected upon issuance of any building permits for the project.” Napa County is confident that, through a combination of the required payment of traffic impact fees (addressed in some detail at item “a,” above) and revised recirculated IS/MND Mitigation Measure #17 (quoted in full below) the project will pay its “fair share” for any potential future signalization of the Soscol Ferry/Devlin Road intersection. The proposed mitigation measure is complete and adequate to address identified cumulative traffic impacts.

As discussed in the project traffic study, this project may have significant impacts at the Soscol Ferry/Devlin Road intersection. Whether through the payment of impact fees or through some other fair-share method duly adopted at the time of any such construction, the permittee and his/her successors in interest shall contribute to the cost of signalization at the Soscol Ferry/Devlin Road intersection should the County deem it necessary to install traffic signals at that intersection at some point in the future.

- d.) *Mitigation Measure #14 – Airport Boulevard/Devlin Road Traffic Signal:* The commenter states that in addition to providing the northbound right turn green arrow overlap, which will run concurrently with the westbound dual left turns, it will also be necessary to prohibit westbound to eastbound U-turns at the intersection to eliminate conflicting movements.

The revised recirculated IS/MND incorporates a revised mitigation measure which addresses signalization at the Airport Boulevard/Devlin Road intersection and reduces traffic safety impacts at the Airport Boulevard/Devlin Road intersection to less-than-significant levels.

The project shall incorporate the turn lane construction, road widening, and other improvements at and adjacent to the Airport Boulevard/Devlin Road intersection outlined under "Airport Boulevard/Devlin Road Intersection" at page 21 of the final project traffic study, with the exception that westbound to eastbound U-turns at the Airport Boulevard/Devlin Road intersection shall be restricted to eliminate protected conflicting turn movements.

- e.) *Queuing Impacts at Soscol Ferry Road/ SR 29, Soscol Ferry Road/ Devlin Road, and Airport Boulevard/ SR29/ SR12:* The commenter states that the project should be required to pay its "fair share" to mitigate cumulative queuing impacts at the above-mentioned intersections. As noted at **Response to Comment 3.9** and **Response to Comment 3.10(a)** (both above), the project will be required to contribute to the Airport Industrial Area cumulative traffic impact mitigation fee program, which is designed to provide funding for the planning and construction of local and regional transportation improvements within and adjacent to the Napa County Airport Industrial Area. Cumulative queuing impacts are, and will be, addressed through projects funded with Airport Industrial Area traffic impact fees. As mitigated by the revised recirculated IS/MND, the project will pay its "fair share" towards cumulative queuing impacts at the identified intersections.
- f.) *Mitigation Measures are Inconsistent with the Napa Pipe Project:* The commenter states that the mitigation measures proposed for the Napa 34 project are inconsistent with the mitigations proposed for the nearby and "recently approved" Napa Pipe project.

The Napa Pipe project has not been approved. The mitigation measures incorporated into the revised recirculated IS/MND are fully consistent with those currently-proposed for Napa Pipe. This is a position which is shared by project Traffic Engineer George Nickelson and, now that he has had more time to review the project, by commenting traffic Engineer Tom Brohard. Quoting from page 48 of the revised recirculated IS/MND;

The Napa Pipe project has been included in the cumulative impact scenarios driving the Update of Airport Industrial Area Traffic Mitigation Fee Program. Despite the fact that Tom Brohard initially raised concerns about a lack of consistency between Napa 34 Commerce Center's cumulative impact mitigations and those of the Napa Pipe project Draft Environmental Impact Report (DEIR) (available for review in the offices of the Napa County Department of

Conservation, Development, and Planning), in his subsequent letter of May 17, 2010 Mr. Brohard finds that;

“The (project) Traffic Study indicates the County of Napa did not require an analysis of cumulative conditions as an area-wide traffic study to accomplish this task and to update the County of Napa Traffic Impact Fee Program is nearly complete. In my telephone discussion on May 12, 2010, George Nickelson indicated an administrative draft of cumulative traffic conditions and the corresponding update of the Traffic Impact Fee Program was now being reviewed by County staff. From his experience in the area, Mr. Nickelson indicated the current fee of \$3,551 per PM peak hour trip will likely increase when the update is adopted. ... Assuming that the County of Napa continues all of the various components of their overall Traffic Impact Fee Program as they have historically done, it appears that the Napa 34 Holdings Commerce Center Project will be required to pay their “fair share” of the regional roadway improvements needed to mitigate the cumulative impacts of all projects in the area.”

In addition, in his letter of May 22, 2010, Mr. Brohard confirms his (correct) understanding that “the study of cumulative traffic conditions, including Napa Pipe, was nearing completion, together with updating of the current traffic impact fee.” Speaking directly to Napa Pipe and the conformity of the Napa 34 Commerce Center project, the Update of Airport Industrial Area Traffic Mitigation Fee Program, and Napa Pipe, George Nickelson’s May 21, 2010 memo finds that, “there will ultimately be a consistent set of mitigation measures that address impacts associated with the Airport Industrial Area” and Napa Pipe.

Response to Comments 3.11 and 3.12: The commenter argues that the “project will have highly significant air quality impacts during the construction phase” and that the IS/MND failed “to impose feasible mitigation measures for construction impacts.”

The proposed project has the potential to violate construction-phase air quality standards and plans as adopted by the Bay Area Air Quality Management District. The project site lies at the southern end of the Napa Valley, which forms one of the climatologically distinct sub regions (Napa County Sub region) within the San Francisco Bay Area Air Basin. The topographical and meteorological features of the Valley create a relatively high potential for air pollution. In the short term, potential air quality impacts are most likely to result from construction activities. Construction emissions would have a temporary effect; consisting mainly of dust generated during grading and other construction activities, exhaust emissions from construction related equipment and vehicles, and relatively minor emissions from paints and other architectural coatings. As modeled by atmospheric scientist James Clark, Ph.D., construction-phase emissions of ROG and NOx from this project would be 507.3 lbs/day and 91 lbs/day, respectively. These volumes are in excess of both the 1999 and 2010 Bay Area Air Quality Management District (BAAQMD) thresholds of significance, which are 80 lbs/day and 54 lbs/day, respectively¹. The BAAQMD recommends incorporating feasible control measures as a means of addressing those impacts in their 1999 CEQA Guidelines (CEQA Guidelines – Assessing the Air Quality

¹ Because the initial project mitigated negative declaration was drafted prior to the June 2, 2010 adoption of the updated 2010 BAAQMD CEQA Guidelines, project impacts have been considered against both the 1999 standards operative at original circulation and the new 2010 BAAQMD standards throughout the Air Quality section.

Impacts of Projects and Plans, BAAQMD, December 1999). If the proposed project adheres to these measures, then BAAQMD recommends concluding that construction-related impacts will be less than significant. Relevant best practices are set forth at Table 2 of the 1999 *Guidelines* and at Table 8-2 of the final draft May 2010 BAAQMD CEQA Guidelines and have been incorporated as mitigation measures.

An additional mitigation measure, recommended by Dr. Clark and agreed to by the applicant, requires the use of alternative fuel construction equipment. "According to the California Air Resources Board (CARB), alternative fuels can reduce particulate matter emissions by up to 50% and nitrogen oxides (NOx) by up to 15%." (*Review of Supplemental Mitigation, Napa 34 Holdings Project, Napa County, California*, James Clark, PhD and Matt Hagemann, June 2, 2010)

Modeling conducted by planning staff and by Dr. Clark concludes that Napa 34 Commerce Center's pollutant emissions during the operational –phase, which is to say, once the proposed buildings are completed and operating, will be below both the BAAQMD's 1999 and 2010 thresholds of significance (for reference, please see **Criteria Pollutants** in the revised recirculated IS/MND.) As a result, operational air emissions will have a less than significant effect with regard to air quality plans or quality standards. All reasonable and feasible mitigation measures are incorporated into the revised recirculated IS/MND.

As mitigated through a combination of BAAQMD recommended best practices and an additional mitigation measure requiring the use of alternative fuel construction equipment incorporated into the project, construction-related impacts will likewise be less than significant.

Response to Comment 3.13: The commenter alleges that project operational phase air emissions will be significant and that the draft IS/MND air quality analysis is deficient. There is nothing in the record to indicate that project operational-phase emissions will be above BAAQMD thresholds, as established by the 1999 or by the 2010 BAAQMD CEQA Guidelines. Quoting from the revised recirculated IS/MND;

Thresholds of significance for the emission of criteria pollutants, including reactive organic gas (ROG), nitrogen oxide (NOx), and ten-micron particulate matter (PM10), are incorporated into both the BAAQMD's 1999 CEQA Guidelines and the recently adopted 2010 BAAQMD CEQA Guidelines. For ongoing operations, encompassing a combination of fixed-sources (such as material off-gassing and structural climate control systems) and mobile-sources (primarily consisting of vehicle trips to and from the site), relevant thresholds of significance for criteria pollutants are established at Table 3 of the 1999 Guidelines. If project emissions do not exceed the established thresholds, they are deemed not to significantly impact air quality either individually or cumulatively and require no further study. The operational emissions associated with this project were modeled using URBEMIS air quality management software (Napa 34 Commerce Center Project, March 3, 2010, URBEMIS 2007 Version 9.2.4) and are compared to relevant air quality thresholds of significance below. Additional URBEMIS modeling was completed by Dr. James Clark as a component of his April 2010 analysis (Comments on the Proposed Napa 34 Holdings Project, Napa County, California, James Clark, PhD and Matt Hagemann, April 20, 2010). Complete URBEMIS modeling results from both staff's analysis and Dr. Clark's analysis are attached (to the revised recirculated IS/MND).

ROG

Threshold of significance (1999 BAAQMD Standards): 82 pounds per day (lbs/d)

Threshold of significance (2010 BAAQMD Standards): 54 lbs/d

Modeled project emissions (NCDCDP Staff analysis) : 15.33 lbs/d

Modeled project emissions (Clark): 26.05 lbs/d

NO_x

Threshold of significance: 82 lbs/d

Threshold of significance (2010 BAAQMD Standards): 54 lbs/d

Modeled project emissions (NCDCDP Staff analysis): 16.98 lbs/d

Modeled project emissions (Clark) : 24.39 lbs/d

PM₁₀

Threshold of significance (1999 BAAQMD Standards): 82 lbs/d

Threshold of significance (2010 BAAQMD Standards): 82 lbs/d

Modeled project emissions (NCDCDP Staff analysis): 19.71 lbs/d

Modeled project emissions (Clark) : 39.06 lbs/d

As analyzed above, the proposed project would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

Response to Comment 3.14: The commenter states that the project will have significant greenhouse gas emissions in excess of relevant CEQA significance thresholds.

The construction and operation of the office and warehousing industrial park proposed here will necessarily contribute to overall increases in green house gas emissions. Emissions would be generated by employee vehicle trips to and from the new and additional jobs located at the facility; from the additional employment and economic activity generated off-site as a result of those on-site jobs; from new and additional vehicle trips to and from the site undertaken by the customers of and visitors to the facility; by the commercial vehicle traffic generated by the proposed warehousing uses; by the production of building materials, their transportation to the site, and the construction process; by the heating, cooling, and lighting of the completed buildings; by the machinery and products utilized in the course of business by eventual tenants of the park; and by the machines, fertilizers, and vehicles used in the ongoing maintenance of the facility.

The project would also result in the permanent removal of more than 27 acres of ruderal grasslands and roughly ½ acre of existing wetlands, releasing a volume of greenhouse gasses which is currently sequestered on-site. However, the significant landscaping and tree planting (for reference, please see **BIOLOGICAL RESOURCES**, in the revised recirculated IS/MND) proposed in this project would more than offset the grassland, wetland, and woodland conversions incorporated into the project; resulting in no significant increase in greenhouse gas emissions through biotic conversion.

Moving on to operational characteristics, our URBEMIS air quality analysis for the project (please see Attachment A of the revised recirculated IS/MND) indicates that the facility, once complete, would result in area source emissions of 128.6 metric tons per year of carbon dioxide equivalents (MT/Y CO₂e) and operational (vehicle) emissions of 1,767.7 MT/Y CO₂e. According to the URBEMIS analysis, the project's total ongoing carbon dioxide emissions (area source plus operational emissions) are predicted to total 1,896.3 MT/Y CO₂e. The 1,896.3 MT/Y CO₂e figure does not include construction-period emissions which are likely to range between 422.3 and 1,093 MT/Y CO₂e.

Neither the State nor Napa County has adopted explicit thresholds of significance for GHG emissions, although State CEQA Guidelines suggest that agencies may consider the extent to which a project complies with requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

Effective June 2, 2010, the Bay Area Air Quality Management District (BAAQMD) adopted qualitative and quantitative thresholds that are instructive in this regard (see *California Environmental Quality Act Guideline Update - Proposed Thresholds of Significance*, BAAQMD, December 7, 2009). Specifically, the BAAQMD suggests that development projects which will emit less than 1,100 MT/Y CO₂e may be considered to have a less than significant impact relative to GHG emissions (both individually and cumulatively). Alternately, the BAAQMD proposes an efficiency-based threshold of 4.6 MT/Y CO₂e per person ("persons" is arrived at by adding project employment to project residential development). However, the 2010 *Guidelines* caution;

In applying the efficiency-based threshold of 4.6 MT/Y CO₂e (per person), the lead agency might also wish to consider the project's total emissions. Where a project meets the efficiency threshold but would still have very large greenhouse gas emissions, the lead agency may wish to consider whether the project's contributions to climate change might still be cumulatively considerable...

At a modeled operational emissions rate of 1,896.3 MT/Y CO₂e, the subject project exceeds the BAAQMD's 1,100 MT/Y CO₂e threshold of significance. However, the BAAQMD's alternative efficiency-based threshold would allow the site emissions of up to 2,870.4 MT/Y CO₂e (based on a proposed 624 person employment level). The first draft of this mitigated negative declaration (March 2010) concluded that at 1,896.3 MT/Y CO₂e, the proposed project met the 2,870.4 MT/Y CO₂e efficiency threshold and that that higher threshold could and should be used to find project impacts associated with GHG emissions less than significant both individually and cumulatively. The April 2010 comments of Dr. Clark, however, find a potentially significant cumulative impact associated with the exceedance of the lower 1,100 MT/Y CO₂e threshold absent mitigation that reduces impacts to a less than significant level (*Comments on the Proposed Napa 34 Holdings Project, Napa County, California*, James Clark, PhD and Matt Hagemann, April 20, 2010).

Cumulative increases in greenhouse gas emissions in Napa County were assessed in the Environmental Impact Report (EIR) prepared for the Napa County General Plan Update and certified in June 2008. Despite adoption of mitigation measures that incorporated specific policies and action items into the General Plan, cumulative impacts from greenhouse gas emissions were found to be significant and

unavoidable. Industrial development of the scale and scope proposed by the project has been programmed for the subject parcel since the County adopted the Airport Industrial Area Specific Plan (AIASP) in 1986. The development levels envisioned in the AIASP further informed the 2008 General Plan revision and provided a basis for the land use, air quality, traffic, and other analyses included in the General Plan EIR. Consistent with State CEQA standards (please see *CEQA Guidelines* §15183), because the project is consistent with an adopted General Plan for which an EIR was prepared, it appropriately focuses on impacts which are “peculiar to the project,” rather than those cumulative impacts which were previously assessed by the General Plan EIR. The cumulative impacts of this project are, therefore, less than considerable.

The BAAQMD has additionally suggested that development projects, plans, and plan amendments which are compliant with a qualified climate action plan, can be assumed to have less than significant impacts with regard to greenhouse gases. Napa County is currently developing an emission reduction plan (or “qualified climate action plan” to use BAAQMD terminology), based on an initial emissions inventory and Climate Action Framework prepared by the Napa County Transportation and Planning Agency (NCTPA) in 2009. While the emission reduction plan for unincorporated Napa County is in preparation, the County requires project applicants to consider methods to reduce GHG emissions and incorporate permanent and verifiable emission offsets, consistent with Napa County General Plan Policy CON-65(e).

The current project incorporates greenhouse gas reduction methods and offsets including bicycle and pedestrian-friendly facilities and improvements, permanent preservation of extensive natural wetlands, high efficiency irrigation, recycled water use, low VOC materials, the planting of more than 300 new trees (of which nearly 100 will be native oaks), designs that take advantage of passive natural cooling and heating, and buildings which are designed to support the structural loads associated with roof-mounted solar arrays.

However, as the project will exceed the BAAQMD’s 1,100 MT/Y CO₂e threshold of significance, applying the most conservative GHG emission threshold, Dr. Clark has proposed, and the applicant has accepted, a series of mitigation measures designed to reduce impacts to a less than significant level. They include a requirement that project buildings be fully solar-ready and that more than 8,000 metric tons of carbon credits be purchased on the Chicago Climate Exchange² and retired by the permittee over the course of

² Started in 2003, the Chicago Climate Exchange (CCX) is the world’s first and North America’s only legally binding rules-based greenhouse gas emissions allowance trading system. Members of the CCX make a voluntary but legally binding commitment to meet reduction targets for greenhouse gas emissions. International efforts to stop climate change, including the CCX, are focused on reducing emissions and reducing atmospheric levels of six greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆). The CCX recognized not only that greenhouse gas emissions should be reduced, but that a market-based trading system (similar to the national program for trading sulfur dioxide emissions) offers the least cost for managing such a reduction. In this cap-and-trade system, members of the CCX agree to reduce their emissions to a certain target each year. Members that reduce emissions below their target receive allowances that can be sold to other members or banked, while those that do not meet their targets can purchase credits at the market price. By establishing a market for carbon reductions, entities have flexibility in how emissions are reduced and also receive incentives for the development and use of lowcost technologies and approaches that reduce emissions. The CCX uses the Carbon Financial Instrument (CFI) contract, defined as 100 metric tons of CO₂ equivalent, as the unit for all reporting and trading of greenhouse gas emission reductions. In 2007, the CCX traded 22.9

the next decade. As mitigated, the project's annual net GHG emissions will be 1,096.3 MT/Y CO₂e (1,896.3 MT/Y CO₂e – the 800 MT/Y credit retirement), which is below the BAAQMD's 1,100 MT/Y CO₂e threshold of significance.

With regard to the ten-year term of the proposed carbon credit retirement mitigation, James Clark, Ph.D. and Matt Hagemann conclude that ten year termed-mitigation is adequate to reduce GHG emissions impacts to less than significant level in their letter of June 2, 2010. Quoting that analysis in full;

California's major initiatives for reducing climate change or greenhouse gas (GHG) emissions are outlined in Assembly Bill 32 (signed into law 2006), a 2005 Executive Order and a 2004 ARB regulation to reduce passenger car GHG emissions. These efforts will reduce GHG emissions to 1990 levels by 2020 – a reduction of approximately 30 percent, and then an 80 percent reduction below 1990 levels by 2050. Thus, by 2020, AB 32 and other state-wide requirements will have reduced cumulative GHG emissions by 30%.

BAAQMD's threshold of 1,100 metric tons per year for GHG CEQA significance (sic, threshold) applies only to cumulative GHG impacts, not project-specific impacts. The BAAQMD CEQA Guidance states, "If annual emissions of operational GHG's exceed these levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change." (BAAQMD CEQA Guidelines, p. 2-4, May 2010.)

Since AB 32 will address cumulative GHG emissions by 30% by 2020 and 80% by 2050, the 10-year period from 2010 to 2020 is the most critical period for the County to impose measures to mitigate cumulative GHG impacts. As discussed above, the mitigation measures imposed reduce the Napa 34 Project's cumulative GHG impacts to below the level of significance to at least 2020. After that date, AB 32 will adequately mitigate cumulative GHG impacts on a statewide basis. As such, with the imposition of the supplemental GHG measures, the Napa 34 Project will have no significant GHG impacts. (Review of Supplemental Mitigation, Napa 34 Holdings Project, Napa County, California, James Clark, PhD and Matt Hagemann, June 2, 2010)

As mitigated, project impacts related to GHG emissions and global warming will be less than significant, both individually and cumulatively.

Response to Comment 3.15: The commenter states that the project is located "approximately 1 mile" from a wastewater treatment plant and that it will, as a result, expose the citizenry to significant odor impacts.

As analyzed in the revised recirculated IS/MND and as stipulated to in the commenter's letter of May 12, 2010 (see Attachment F at the revised recirculated IS/MND), odor impacts will be less-than-significant. The Napa Sanitation District operates a wastewater treatment plant approximately 1.4 miles to the northwest of the Napa 34 Commerce Center project site. The facility, which is located at 1515 Soscol Ferry Road, is a 15 million gallon per day treatment plant that includes preliminary treatment,

million tons of CO₂ equivalent for a value of \$72.4 million. (NIACS Briefing, the Chicago Climate Exchange, US Forest Service, Northern Research Station, May 21, 2008).

primary treatment, biological secondary treatment, secondary clarification or sedimentation, sand filtration, chlorination, sludge digestion, and solids dewatering (*Comments on the Proposed Napa 34 Holdings Project, Napa County, California*, James Clark, PhD and Matt Hagemann, April 20, 2010). According to the 1999 BAAQMD CEQA Guidelines, the screening level standard for potential impacts associated with “frequently exposing members of the public to objectionable odors” associated with a wastewater treatment plant is two miles. The 2010 BAAQMD standards reduce that screening level distance to one mile. While portions of the subject parcel will, indeed, be located within one mile of the wastewater treatment plant, the Napa Airport area is characterized by a strong and predictable wind pattern (that is chiefly why the airport was located there in the first place) with winds blowing from the west and south-southwest; that wind pattern predictably moves odors from the Napa Sanitation treatment plant away from the Napa 34 site. Additionally, the second step in the 2010 BAAQMD odor screening process involves determining whether or not any confirmed odor complaints exist for each of the past three years. No confirmed odor complaints exist for the project area (see *Review of Supplemental Mitigation, Napa 34 Holdings Project, Napa County, California*, James Clark, PhD and Matt Hagemann, June 2, 2010). As a result, no significant impact related to odors and the Napa Sanitation Wastewater Treatment facility would result.

Response to Comment 3.16: The commenter states that the project, “will have significant impacts together with the nearby Napa Pipe Project. The two projects, only two miles apart, will obviously be contributing to the same air pollution, including ROG, NO_x, PM, GHG, and other pollutants. Since the Napa Pipe Project has admittedly significant air quality impacts, and the Napa 34 Project will be adding cumulatively to that pollution, the Napa 34 Project therefore necessarily has significant cumulative air quality impacts.” As noted above, the Napa Pipe project is yet-to-be approved. However, because a DEIR has been completed for Napa Pipe, the commenter correctly indicates that it is a foreseeable project that is appropriately considered in the cumulative impacts analysis incorporated into the Napa 34 revised recirculated IS/MND.

The Napa Pipe Draft EIR (October 23, 2009 draft) identifies a number of significant unavoidable impacts related to air quality, including “development that results in population growth that exceeds the intensity anticipated in the latest clean air planning assumptions,” (Impact AQ-1) and “the project would generate new emissions that would affect long-term air quality... (including) ROG emissions... that cannot be controlled” (Impact AQ-3). While the emissions from the Napa 34 project would contribute to foreseeable cumulatively significant impacts from the potential Napa Pipe development, given the size of the air basin planning area, the same could be said of any project developed in the Napa Valley subsequent to the approval of Napa Pipe (as that project is now envisioned.) The key test with regard to cumulative impacts is whether or not they will be *cumulatively considerable*. As the Airport Industrial Area has been zoned, specific plan-designated, and otherwise programmed for intensive industrial development for more than a decade and the development proposed in the Napa 34 project is both significantly less extensive than was imagined in previous planning documents (as a result of the three acres of wetlands which are being preserved as a result of the project) and well below even the BAAQMD’s newly-stringent operational thresholds of significance for criteria pollutants (for reference see **Response to Comment 3.13**, above), the project’s contribution to the potential cumulative air quality impacts identified in the Napa Pipe DEIR is deemed to be less-than-considerable cumulatively.

Response to Comment 3.17: The commenter suggests that the project will have significant adverse water supply impacts, including impacts on reliability and a non-zero water footprint. The draft IS/MND incorporated mitigation measures which were designed to mitigate impacts on water service reliability to less-than-significant levels and to compensate for the project's lack of a zero water footprint through payment into the City of American Canyon's updated water capacity and impact fee programs (which provide funding to acquire additional long-term water resources and improve and develop American Canyon's water treatment and distribution system). With these mitigations, in their October 2009 Water Supply Report the City of American Canyon finds that, "the potable water impacts of the Napa Commerce Center project will be fully mitigated by the financial contribution it will make to the water capacity fee program." Napa County concurs with this determination and has incorporated the City of American Canyon's complete water service analysis into the draft IS/MND by reference. Additional mitigation measures, as identified by Matt Hagemann, P.G. in his letter of May 11, 2010 (*Review of Supplemental Mitigation, Napa 34 Holdings Project, Napa County, California*) are designed to further mitigate impacts related to water services reliability and were incorporated into the revised recirculated IS/MND; they are copied below.

22. *The permittee shall ensure that landscaping for the project employs native, drought-tolerant plant species to the greatest extent practicable, provided that such landscaping shall not conflict with those mitigations and project specifications addressing existing and proposed on-site wetlands.*
23. *The permittee shall install water-conserving plumbing fixtures that maximize efficiency and water conservation in project buildings. These shall include, without limitation, dual-flush toilets, and ultra low-flush or waterless urinals.*

Response to Comment 3.18: The commenter alleges that the project as analyzed in the draft IS/MND would have significant adverse impacts on stormwater pollution.

As mitigated, all water quality impacts will be less than significant. Quoting from the revised recirculated IS/MND;

The proposed project will not violate any known water quality standards or waste discharge requirements. The project incorporates an integrated approach to stormwater management and wetland preservation in which on-site stormwater flows are pretreated and then allowed to drain into the preserved on-site wetland in a manner which mimics natural hydrologic flows. The proposed system, which is detailed in the applicant's March 2010 Stormwater Management Plan and in their Preliminary Drainage Report of the same date, has been vetted by both the Department of Public Works and the San Francisco Bay Regional Water Quality Control Board and both agencies have voiced initial support for the proposed system's somewhat novel (at least for Napa County) combined approach to stormwater management and wetland enhancement. The project will ultimately discharge stormwater into an approved storm drainage system designed to accommodate the drainage from this site. Given that the permittee will be required to obtain a stormwater permit from the Regional Water Quality Control Board, via a program which is in-part administered by the County Department of Public Works, ample opportunity is provided for both agencies to fine tune the details of the conceptual system as it progresses

into a built reality. As a clarifying point, although the project initially requested a waiver from the County's stormwater requirements, pursuant to a January 19, 2010 letter from Jeannette Doss of the Napa County Department of Public Works to Brad Shirhall of the applicant team, Napa County will not be issuing a stormwater waiver for this project. Stormwater flows will, as a result of the integrated system proposed here, meet all of the County's stormwater requirements.

The function of this project's integrated stormwater pollution prevention, drainage, and wetland preservation systems will depend heavily on the care and attention that go into the ongoing maintenance of the Parcel "J," "K," and "L" wetland and detention basins and the buffer areas which surround them. Mitigation measures requiring a final third-party stormwater pollution prevention plan, ongoing wetland preservation, and ongoing wetland maintenance are incorporated (into the revised recirculated IS/MND).

As mitigated by the revised recirculated IS/MND, project impacts on water quality will be less than significant. Project impacts related to water quality and the risk that the project will violate waste discharge requirements will also be less than significant.

Comment № 4 - Caltrans

Response to Comment 4.1: The commenter requests that the project traffic impact study be augmented to include an analysis of cumulative and cumulative-plus-project conditions. As noted at **Comment 3.9**, above, and elsewhere in this document, consistent with guidance provided by Rick Marshall in his capacity as Napa County's chief traffic engineer, the project traffic impact analysis relied on the cumulative buildout traffic findings included in the County's ongoing *Update of Airport Industrial Area Traffic Mitigation Fee Program*. The Airport Industrial Area, in which the Napa 34 Commerce Center project is located, is subject to an adopted and County-mandated cumulative traffic impact mitigation fee program which is designed to provide funding for the planning and construction of local and regional transportation improvements within and adjacent to the Napa County Airport Industrial Area in anticipation of the development of, amongst others, the projects mentioned in the revised recirculated IS/MND. The current fee is \$3,551 per PM peak hour trip. The County is, additionally, in the process of updating the fee and is engaging in a thoroughgoing analysis of short, mid, and long-term cumulative traffic modeling as a component of that study. The *Update of Airport Industrial Area Traffic Mitigation Fee Program* considers and incorporates all approved and pending projects, specifically including Napa Pipe, in its cumulative impact scenarios. The *Update* analyzes complete buildout of the Airport Industrial Area, cumulative development outside of the Airport Industrial Area, and long term predicted regional traffic growth on nearby state highways.

Response to Comment 4.2: The commenter requests that the project traffic impact study be augmented to include peak hour turning movement volumes for all study intersections under project, 2030 cumulative, and 2030 cumulative-plus-project conditions.

The traffic impact study includes project and project-plus-Greenwood Commerce Center turning movement volumes for all study intersections. Please see **Comment 4.1**, above, for the County's response regarding the analysis of cumulative traffic impacts.

Response to Comment 4.3: The commenter states that the project must include extending the existing northbound left turn lane at the state route 29/ Airport Boulevard intersection in order to accommodate the plus-project queue. A mitigation measuring requiring improvements as detailed by Caltrans in **Comment 4.3** has been incorporated into the revised recirculated IS/MND and is copied below.

The project shall incorporate the turn lane construction, road widening, and other improvements at and/or adjacent to the Airport Boulevard/CA-29 intersection as required by the Department of Transportation in their letter of March 3, 2010. To wit, "the project must include extending the existing northbound left turn lane at the state route 29/Airport Boulevard intersection in order to accommodate the Plus Project queue;" and, "please be reminded that a left turn lane requires both storage and deceleration length."

Comment № 5 - Living Rivers Council

Response to Comment 5.1: The commenter requests that the project include measures which ensure that: a.) the on-site wetland is restored and revegetated to improve habitat for animals; b.) a barrier is erected to keep terrestrial animals from crossing the highway; c.) a wildlife corridor setback is established around the on-site wetland; d.) roadway and parking lot runoff is filtered to prevent wetland contamination; e.) landscaping utilizes native plants; and f.) chemical spraying is prohibited.

With regard to sub-comment b.), under Highway 29, an existing six-foot diameter box culvert connects the subject parcel to the property to the east. There is currently, and will be at project completion, a fairly significant grade differential between the project site and Highway 29, with the travel lanes of Highway 29 generally being six to 10 feet above the grade of adjoining portions of the subject property. These significant existing and proposed grade differentials will, in all probability, direct wetland animals into and through the large existing box culvert should they attempt to travel between the subject property and parcels on the east side of the highway. Given the more than five foot height difference between the highway and the subject parcel, no additional fencing is necessary, and fencing would, in fact tend to corral animal movement through what should be a generally open system.

With regard to items a.) and c.) - f.), Napa County responds that a mitigation measure was incorporated into the revised recirculated IS/MND which implements all of the remaining comments/requests raised in the commenter's letter; it is copied below.

Prior to the issuance of a building permit, a grading permit, or the recordation of a final parcel map, the permittee shall submit a binding drainage system/wetland maintenance plan for the review and approval of the Departments of Public Works and Planning. The submitted plan shall stipulate an ongoing maintenance regime (including, without limitation, financing details and implementation/enforcement

measures such as CC&Rs and/or third party conservations easements) for the integrated project area wetland and drainage system. The wetland shall be restored and revegetated to improve habitat for animals associated with the wetland ecosystem. Permanent restricted-access buffer zones shall be established around the protected wetland as shown in submitted plans or otherwise as consistent with the site-specific requirements of the Regional Water Quality Control Board; incidental human traffic through or interference in these zones shall be restricted through fencing or other barriers acceptable to the Planning Director and the Regional Water Quality Control Board. Revegetation within the wetland and wetland buffer areas shall consist of appropriate native plants. No chemical spraying shall be allowed in the wetland or wetland buffer areas. The submitted maintenance plan shall be consistent with the Napa County Post Construction Runoff Management Requirements manual adopted by the Board of Supervisors on June 3, 2008, and in particular with Chapter 5 at p. 14, Implementation and Maintenance of Requirement.

Attachments:

- Attachment A:** Department of Fish and Game letter of April 15, 2010
- Attachment B:** John Stephens letter of April 19, 2010
- Attachment C:** Richard Drury for Carpenters Local 751 letter of April 20, 2010 (with attachments)
- Attachment D:** Caltrans letter of April 21, 2010 (with attachments)
- Attachment E:** Living Rivers Council letter of May 17, 2010

Attachment A



State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, Governor
John McCamman, Director



RECEIVED

APR 15 2010

NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

April 15, 2010

CDPC
MEETING

APR 21 2010

AGENDA ITEM
NO. 9-C

Mr. Christopher M. Cahill
County of Napa
Department of Conservation, Development and Planning
1195 Third Street, Suite 210
Napa, CA 94559

Dear Mr. Cahill

Subject: Napa 34 Holdings Commerce Center Use Permit and Variation to Development Standards Application No. P09-00329-UP and Tentative Parcel Map and Lot Line Adjustment Application No. P09-00330-TM, Mitigated Negative Declaration, SCH #2010032066, City and County of Napa

The Department of Fish and Game (DFG) has reviewed the Mitigated Negative Declaration (MND) prepared for the Commerce Center Use Permit and Variation to Development Standards Application (Project). The MND discusses the environmental impacts associated with the new construction and operation of an industrial park located on a 33.9-acre parcel located at the southwest corner of State Route 29 and Airport Boulevard.

1.1 Mitigation Measure 2 states that construction activities shall occur outside the breeding season (March – August) unless a pre-construction nest survey is conducted no more than 30 days prior to commencing construction activities. This measure states that if an active nest is found, a buffer will be established around the nest in consultation with a biologist and DFG. Nest construction for some species is completed in approximately two weeks or shorter and thus surveys completed 15 to 30 days prior to tree removal or ground disturbance could cause abandonment of the nest and/or eggs.

Fish and Game Code § 3503.5 states it is unlawful to take, possess, or destroy any birds in the Orders of Falconiformes or Strigiformes (birds-of-prey or raptors) or take, possess, or destroy the nest or eggs of any such bird. With respect to surveys for nesting raptors, DFG recommends that the Project specifies: 1) that surveys for nesting raptors will be conducted no earlier than 14 days prior to tree removal and/or breaking ground, 2) in the event that nesting raptors are found, the project applicant will consult with DFG and obtain approval for nest-protection buffers prior to tree removal and/or ground-breaking activities, and 3) nest protection buffers will remain in effect until the young have fledged.

1.2 Mitigation Measure 3 states that a pre-construction nest survey for western burrowing owl shall be conducted no more than 30 days prior to commencing construction activities during March through August. This measure states that if an active nest is found, a buffer will be established around the nest in consultation with a biologist and DFG. Buffers should be

↑ established around occupied nests and burrows at all times of the year, not only during the breeding season. A site-specific proposal for surveys and eviction of owls from the site is to be reviewed and approved by DFG prior to implementation. Additionally, DFG recommends the following be conducted by a qualified biologist to ensure appropriate avoidance and mitigation measures:

- 1.2
CONT.
- 1) Burrowing owl surveys should be conducted during both the wintering (December 1 through January 31) and nesting (April 15 through July 15) seasons, unless the species is identified on the first survey. These surveys should take place from one hour before to two hours after sunrise, as well as two hours before to one hour after sunset. Surveys should be conducted on multiple days during each of the above mentioned seasons. As burrowing owls were documented during wintering or breeding seasons, additional surveys should be conducted prior to construction to identify occupied burrows within the Project's impact area.
 - 2) Surveyed areas should include all potential habitat located within 150 meters of the proposed Project's footprint and staging areas. A 150-meter buffer zone should be surveyed to identify burrows and owls outside of the proposed Project area that may have impacts by the proposed Project construction activities.
 - 3) A report on the proposed Project's survey results should be prepared and submitted to DFG staff according to the guidelines identified in the DFG "Staff Report on Burrowing Owl Mitigation" (1995).
 - 4) To avoid violation of Fish and Game Code §§ 3503 and 3503.5, any occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by DFG verifies through non-invasive methods that either: a) the birds have not begun egg laying and incubation; or b) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.
 - 5) To off-set the loss of any foraging and/or burrow habitat on the Project site, all suitable habitat which will be impacted should be replaced acre for acre with suitable, occupied habitat at an appropriate location. Not less than 6.5 acres of foraging habitat per breeding pair or unpaired resident bird should be acquired and permanently protected. The protected lands should be occupied burrowing owl habitat and at a location acceptable to DFG. The site should provide for the long-term management and monitoring of the species in addition to permanent protection either through a Conservation Easement or transfer of fee title to a DFG-approved entity.
 - 6) No disturbance should occur within 50 meters of occupied burrows during the non-breeding season (September 1 through January 31) or within 75 meters of occupied burrows during the breeding season (February 1 through August 31).
- ↓

- 1.2
CONT. ↑
- 7) If the destruction of burrows is unavoidable, and occupied nests have been shown through non-invasive methods to be absent, passive relocation techniques should be used for 48 hours prior to construction activities to ensure owls have left the burrow.

If suitable habitat is destroyed prior to adequate burrowing owl surveys, DFG may assume owls to have been present, and mitigation should be required by the Lead Agency in consultation with DFG.

Mitigation Measure 4 states that a Swainson's hawk nesting and foraging analysis shall be provided to DFG, proposing specific mitigation consistent with DFG standards.

As noted in the Biological Resources Assessment dated June 2009, there is a known nesting location approximately 1.25 miles north of the Project site as well as adjacent nesting habitat. To mitigate for the loss of foraging habitat, appropriate mitigation should be provided based on the following ratios:

- 1.3
- For projects within one mile of an active nest tree – provide one acre of land for each acre of development authorized (1:1 ratio).
 - For projects within 5 miles of an active nest tree but greater than one mile from the nest tree – provide 0.75 acres of land for each acre of urban development authorized (0.75:1 ratio).
 - For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree – provide 0.5 acres of land for each acre of urban development authorized (0.5:1 ratio).

Project proponents should ensure the lands are protected in perpetuity and should provide for the long-term management of the lands by funding a management endowment.

Swainson's hawk is listed as a threatened species by the California Fish and Game Commission pursuant to the California Endangered Species Act. Please be advised that a California Endangered Species Act (CESA) Permit must be obtained if the project has the potential to result in take of species listed under CESA, either during construction or over the life of the project. Issuance of a CESA Permit is subject to California Environmental Quality Act (CEQA) documentation; therefore, the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the project will impact CESA listed species, early consultation is encouraged, as significant modification to the project and mitigation measures may be required in order to obtain a CESA Permit.

1.4 ↓

Please be aware that DFG will require a Lake and Streambed Alteration Agreement (LSAA), pursuant to Section 1600 et seq. of the Fish and Game Code for all activities which will impact drainages on the project. Issuance of the LSAA is subject to CEQA. DFG, as a responsible agency under CEQA, will consider the environmental document, which should

Mr. Christopher M. Cahill
April 15, 2010
Page 4

1.4 CONT. ↑ Fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the agreement.

DFG appreciates the opportunity to provide comments on the Mitigated Negative Declaration for the proposed Project. If you have any questions, please contact Ms. Suzanne Gilmore, Environmental Scientist, at (707) 944-5536; or Mr. Greg Martinelli, Water Conservation Supervisor, at (707) 944-5570.

Sincerely,



Charles Arner
Regional Manager
Bay Delta Region

cc: State Clearinghouse

Attachment B

Chris Cahill, Planner
Napa County
Conservation, Development & Planning Department
1195 Third Street, Suite 210
Napa, CA 94559

CDPC
MEETING

APR 21 2010

AGENDA ITEM
NO. 9-C

April 19, 2010

Re: Napa 34 Holdings Commercial Center, Use Permit PO-00330-TPM

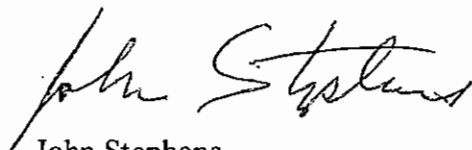
The Staff Report lists the Biological Resources Assessment written by Northfork Associates, June 1, 2009. It states that no Vernal Pool Fairy Shrimp (VPFS) and the California Red Legged Frogs (CRLF) were found by Monk & Associates at the site of the three acre wetland. It was reported that the survey was conducted at various times during the year and that the, "Final report summarized their finding are pending." (Page 157)

2.1 | It is my understanding that when Cal Trans conducted wildlife surveys for the Airport Way and Highway 29 interchange they concluded that CRLF was present at the wetland. How can one year the frog be present and the next year not?

2.2 | However the final report by Monk & Associates was not in the file. How can the public or the Planning Commission make an informed comment or decision without a complete record and make a comment or base a finding on incomplete information? Northern California has had a three year drought. The studies referred to above were conducted in the last year of the drought. The question I have is if there is not water of course there will be no CRLF or VPFS present. Dr. Monk is the eminent authority on CRLF and I respect his opinion but the question I have, has he taken into account the fact that the study was conducted during a dry year? Has soil samples been taken and Fairy Shrimp been attempted to be raised artificially to detect their presence?

A fair argument can be made that the project could have a cumulative impact on the CRLF population if they are present at the site. Given this incompleteness of the record I urge the Planning Commission postpone the hearing for Napa 34 Holdings Commercial Center until the Monk report can be produced.

Sincerely,



John Stephens
348 Minahen St.
Napa, CA 94559

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APR 19 2010

NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

Attachment C

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**** Also admitted in Illinois

April 20, 2010

BY ELECTRONIC MAIL and US MAIL

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AT 9:50 AM
APR 21 2010

NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

RE: Comments on Mitigated Negative Declaration for Napa 34 Holdings Commerce Center Use Permit and Variation to Development Standards Application No P09-00329-UP and TPM and LLA Application No P09-00330-TPM;
SCH Number: 2010032066

Honorable Members of the Planning Commission and Mr. Cahill:

3.1 I am writing on behalf of the on behalf of Carpenters Local 751, its members, and City of Napa resident, Mr. Dan Digardi (collectively, "Local 751") concerning the proposed Preliminary Mitigated Negative Declaration and its initial study and supporting documents ("MND") for Napa 34 Holdings Commerce Center Use Permit and Variation to Development Standards Application No P09-00329-UP and TPM and LLA Application No P09-00330-TPM; SCH Number: 2010032066 ("Project" or "Napa 34 Project"). Our experts have reviewed the MND and have determined that the Project will have significant adverse environmental impacts, and that an environmental impact report ("EIR") should therefore be prepared under the California Environmental Quality Act ("CEQA," Public Resources Code section 21000, et seq.) to fully analyze these impacts and propose feasible measures to mitigate those impacts.

I. INTRODUCTION.

The County proposes to approve the massive new construction Project with no EIR whatsoever. Instead, the County has concluded that the Napa 34 Project will have no adverse impacts of any sort and that a mitigated negative declaration may therefore be issued. It is simply untenable for a Project of this magnitude to be approved with a mere MND.

3.2 The Napa 34 Holdings Commerce Center involves the approval of a Use Permit to allow the construction and operation of an industrial park totaling 490,500 square feet ("sf") of new development in 8 buildings, including: 1) two 41,700 sf two story office buildings; 2) two 7,600 sf single story office buildings with ancillary warehouse spaces; 3) one 8,800 sf single story office building with ancillary warehouse space; and 4) 152,600 sf, 148,800 sf, and 81,600 sf single story warehouse/distribution buildings with ancillary office space. Approximately 73% (or 356,000 sf) of the total development floor area would be dedicated to warehousing uses, while the remaining 27% (or 134,500 sf) would be utilized as office space. In total, the Napa 34 Project will be almost as large as the tallest building in San Francisco, the Transamerica Pyramid, which totals 530,000 square feet. It is simply untenable to permit such a massive project without first preparing an environmental impact report.

By contrast, courts have required EIRs for comparatively small projects. (*Arviv Enterprises v. South Valley Area Pln. Comm.* (2002) 101 Cal. App. 4th 1333 (EIR required for 21 homes); *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597 (EIR required for 40 homes); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 329-333 (23 homes); *Oceanview Estates Homeowners Assn. v. Montecito Water Dist.* (2004) 116 Cal.App.4th 396 (EIR required for cover to protect reservoir); *Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal.App.4th 357 (EIR required for children's playground))

Indeed, the County of Napa itself has recently prepared an environmental impact report ("EIR") for the nearby Napa Pipe project, less than three miles away from the Napa 34 Project. The two projects will clearly have cumulative impacts on traffic, air quality, greenhouse gas emissions and other factors. In fact the Napa Pipe and Napa 34 Projects impact many of the same intersections, creating cumulative traffic impacts. Nevertheless, the MND for the Napa 34 Project ignores the Napa Pipe Project entirely and fails to analyze cumulative impacts at all. As a result, as discussed below, the two projects include contradictory and inconsistent mitigation measures. Since the Napa 34 Project will have cumulative impacts together with the Napa Pipe Project, and the County has acknowledged that the Napa Pipe Project has significant impacts requiring an EIR, by necessary implication, the Napa 34 Project has significant cumulative impacts requiring an EIR.

As discussed below, expert comments establish that the Napa 34 Project will have significant impacts far in excess of applicable CEQA significance thresholds in several areas, including, but not limited to the following:

3.2
CONT.

- Construction Emissions: As discussed by atmospheric scientist, Dr. James Clark, PhD., the three-year construction phase of the Project will generate significant levels of pollution far above the applicable CEQA significance thresholds of the Bay Area Air Quality Management District ("BAAQMD"). Project construction will generate emissions of particulate matter ("PM"), diesel exhaust, nitrogen oxides ("NOx"), and reactive organic gases ("ROGs"). These emissions will expose workers and nearby residents to significant health risks, and the MND fails to include adequate mitigation measures to reduce such risks.
- Operational Emissions: Dr. Clark also concludes that the Project will generate significant operational emissions, which will exceed applicable significance thresholds of the BAAQMD. The Project will generate significant emissions of NOx and ROGs, which are the primary components of smog. These impacts will be even more significant with considered with the cumulative impacts of the Project together with other proposed and pending projects in the area, including the nearby Napa Pipe Project, less than three miles away. (See, Napa Pipe Draft Environmental Impact Report SCH No. 2008122111, incorporated herein by reference in its entirety).
- Greenhouse Gas Impacts: The Project will create greenhouse gas emissions in excess of significance thresholds established by the BAAMQD and the California Air Pollution Control Officers' Association ("CAPCOA"). These impacts will be even greater when combined with the cumulative emissions from many other proposed and pending projects in the area. Nevertheless, the MND fails to impose feasible mitigation measures that could significantly reduce greenhouse gases.
- Traffic: As discussed by traffic engineer Tom Brohard, P.E., the MND contains significant errors in trip generation calculations. In addition to individually significant traffic impacts, the Napa 34 Project will have significant cumulative traffic impacts together with the nearby Napa Pipe Project, which will impact many of the same intersections. Correcting these calculations shows that the Project will have significant unmitigated traffic impacts at:
 - Airport Boulevard/SR29/SR12
 - Airport Boulevard/Devlin Road
 - Soscol Ferry Road/Devlin Road
 - Soscol Ferry Road/SR29
 - Soscol Ferry Road/SR12/SR29/SR221
- Stormwater: As discussed by hydrogeologist, Matthew Hagemann, M.S., P.G., the Project will have significant impacts on stormwater run-off, with potential adverse impacts on water quality.

3.2
CONT.

- Water Supply: The Project will have significant impacts on water supply according to a detailed water supply report prepared by the City of American Canyon. The City of American Canyon's water supply report concludes that, "*the [Napa 34] project would reduce the reliability of American Canyon water service.*" (City of American Canyon, Water Supply Report, p. 5 (Oct. 14, 2009))
- Cumulative Impacts: The Project will have cumulative impacts together with the recently approved Napa Pipe Project and other projects in the area. Cumulative impacts include, but are not limited to traffic, air quality and greenhouse gas emissions. The MND ignores the Project's cumulative impacts entirely.

These comments are supported by the expert analysis of traffic engineer Tom Brohard, PE (attached as Exhibit A), and by air quality expert Dr. James Clark, Ph.D. and hydrogeologist Matthew Hagemann, PG, MS (Attached As Exhibit B). Their comments are attached hereto and are incorporated herein by reference in their entirety. We reserve our right to submit supplemental written and oral comments at any hearing held by the County of Napa and any of its agencies ("County") concerning this matter.¹

We urge the County to reject the mitigated negative declaration and prepare an EIR for the Project to analyze its impacts and to propose feasible mitigation measures and to consider feasible alternatives. Any new CEQA document will have to be recirculated for public review since it will necessarily contain significant new information and/or new mitigation measures.

II. STANDING

3.3
CONT.

Members of Local 751 live, work and recreate in the immediate vicinity of the Project site. These members will suffer the impacts of a poorly executed or inadequately mitigated Project, just as would the members of any nearby homeowners association, community group or environmental group. In addition, construction workers will suffer many of the most significant impacts from the Project as currently proposed, such as from construction emissions, traffic and operational emissions. Therefore, Local 751 and its members have a direct interest in ensuring that the Project is adequately analyzed and that its environmental and public health impacts are mitigated to the full extent feasible. Mr. Dan Digardi is a resident of Napa who wants to ensure that the Project receives full environmental review so that the Project's environmental impacts will be reduced to the maximum extent feasible, while providing the community with the greatest economic benefits.

¹ We reserve the right to supplement these comments at later hearings and proceedings for this Project. See, *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109.

III. LEGAL STANDARD: AN EIR IS REQUIRED SINCE THERE IS A "FAIR ARGUMENT" SUPPORTED BY EXPERT EVIDENCE THAT THE PROJECT MAY HAVE ADVERSE ENVIRONMENTAL IMPACTS

As the Supreme Court very recently held, "If no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR."

(*Communities for a Better Environment v. South Coast Air Quality Management Dist.*

(*ConocoPhillips*) (2010) 48 Cal. 4th 310, 319-320 ("CBE v. SCAQMD"), citing, *No Oil, Inc. v. City of Los Angeles*, 13 Cal.3d at pp. 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal. App. 3d 491, 504-505) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal. App. 4th 98, 109.)

34
The EIR is the very heart of CEQA. (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal. App. 4th 903, 927) The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." *Bakersfield Citizens*, 124 Cal.App.4th at 1220. The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." *Laurel Heights Improvements Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392. The EIR process "protects not only the environment but also informed self-government." *Pocket Protectors*, 124 Cal.App.4th 927.

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." Pub. Res. Code § 21080(d) (emphasis added); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (CEQA Guidelines § 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. Pub. Res. Code §§ 21100, 21064. Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." *Citizens of Lake Murray v. San Diego*, 129 Cal.App.3d 436, 440 (1989). CEQA contains a "preference for resolving doubts in favor of environmental review." *Pocket Protectors*, 124 Cal.App.4th at 927 (emphasis in original).

A negative declaration is improper, and an EIR is required, whenever substantial evidence in the record supports a "fair argument" that significant impacts may occur. Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to

support the agency's decision. CEQA Guidelines § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon v. Stanislaus* (1995) 33 Cal.App.4th 144, 150-151 (1995); *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors*, 124 Cal.App.4th at 928.

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

Kostka & Zishcke, *Practice Under CEQA*, §6.29, pp. 273-274. The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a *preference for resolving doubts in favor of environmental review*." *Pocket Protectors*, 124 Cal.App. 4th at 928 (emphasis in original).

As a matter of law, "substantial evidence includes . . . expert opinion." Pub.Res.Code § 21080(e)(1); CEQA Guidelines § 15064(f)(5). CEQA Guidelines demand that where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the environmental effects to be significant and prepare an EIR. CEQA Guidelines § 15064(f)(5); Pub. Res. Code § 21080(e)(1); *Pocket Protectors*, 124 Cal.App. 4th at 935. "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." Pub. Res. Code § 21068; see also Guidelines 15382. An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal. 3d 68, 83. In the recent *Pocket Protectors* case, the court explained how expert opinion is considered. The Court limited agencies and courts to weighing the admissibility of the evidence. *Id.* In the context of reviewing a Negative Declaration, "neither the lead agency nor a court may 'weigh' conflicting substantial evidence to determine whether an EIR must be prepared in the first instance." *Id.* Where a disagreement arises regarding the validity of a negative declaration, the courts require an EIR. As the *Pocket Protectors* court explained, "It is the function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project." *Id.*

3.4
CONT.

As discussed below, highly-qualified experts have submitted evidence herewith that clearly establishes that the Project may have significant adverse environmental impacts. An EIR is therefore required.

3.5

IV. THERE IS A FAIR ARGUMENT THAT THE PROJECT MAY HAVE SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS

There is a "fair argument" that the Project may have significant adverse environmental impacts. Therefore, an EIR must be prepared to analyze and propose mitigation for those impacts. (*CBE v. SCAQMD*, 48 Cal. 4th at 319-320; *Mejia v. Los Angeles* (2005) 130 Cal.App.4th 322; *Pocket Protectors v. Sacramento* (2005) 124 Cal.App.4th 903)

A. The Project Will Have Significant Adverse Traffic Impacts.

Traffic Engineer Tom Brohard, P.E., has submitted detailed expert analysis demonstrating that the Project will have highly significant adverse traffic impacts. His analysis demonstrates that the traffic analysis prepared for the MND is erroneous and was done using an improper methodology. Mr. Brohard also points out that the Napa 34 Project will have very significant cumulative impacts when considered together with the recently approved Napa Pipe Project. Mr. Brohard identifies the following significant traffic impacts that should be analyzed in an EIR:

1. Analysis of Near Term Conditions Is Flawed.

3.6

From the July 21, 2009 application for the Project, construction of the industrial park will be phased, with Phase 1 to be completed in 12 months and Phase 2 to be completed in 24 months. Therefore, it will be at least two more years before the Project is completed and occupied. The two analyses in the Traffic Study were done for existing conditions based on June 2009 traffic counts, and then for near term conditions, assuming completion of the Project and the approved Greenwood Business Park directly across Devlin Road opposite the Project. To properly assess near-term conditions and impacts, the baseline volumes used in the Traffic Study must be revised as follows:

- a) Adjust Traffic Counts to a Thursday in August - Increase the existing AM and PM peak hour traffic counts made on Tuesday June 2, 2009, Wednesday June 3, 2009, and Thursday June 4, 2009 to reflect worst case conditions on a Thursday in August, a practice utilized by the City of Napa immediately adjacent to the study intersections.
- b) Adjust Baseline Volumes for Annual Ambient Growth - Include an annual ambient growth factor to account for small projects as well as general traffic growth between the June 2009 traffic counts and project completion (at least two years from now), so add in three years of annual ambient growth to the adjusted traffic volumes for a Thursday in August.

- 3.6
CONT.
- c) Adjust Baseline Volumes to Include Trips for All Other Approved Projects - Include traffic from all other approved but not yet completed and occupied projects in the area that will contribute traffic to the study intersections.

Mr. Brohard concludes that correcting these three errors above will increase the June 2009 traffic counts to correspond to traffic volumes at Project completion in Year 2012. The resulting traffic volumes would represent a Thursday in August (utilizing the same methodology as the adjacent City of Napa), reflect traffic to and from small projects as well as annual ambient traffic growth, and account for traffic to and from other approved but not yet constructed or occupied projects (in addition the approved Greenwood Business Park). Project traffic can then be added to this adjusted baseline that better represents traffic volumes in Year 2012, and this will then enable the significant Project traffic impacts to be properly determined and analyzed.

Mr. Brohard concludes that there is at least a fair argument that the addition of project traffic to the higher baseline volumes may have an adverse impact on traffic flow (see below). These impacts should be analyzed in an EIR and additional mitigation measures adopted as required for the Project.

2. **An Significant Traffic Impact Will Occur With Baseline Adjustments at Airport Boulevard/SR29/SR12.**

3.7

Without making the baseline adjustments above, Table 5 on Page 13 of the Traffic Study indicates delay at Airport Boulevard/SR29/SR12 in the AM peak hour will increase from 41.4 seconds to 53.6 seconds. Mr. Brohard concludes that with the upper threshold of Level of Service (LOS) D at 55.0 seconds, there is at least a "fair argument" that the adjustments above plus Project traffic will result in LOS E conditions (an increase of only 1.5 seconds of delay) at Airport Boulevard/SR29/SR12. Resulting delay of 55.1 seconds or more will change the AM peak hour intersection operation from LOS D to LOS E, creating a significant project traffic impact that requires mitigation (see Significance Criteria on Page 8 of the Traffic Study). Mitigation at this intersection will also require approval and concurrence from Caltrans. An EIR should be prepared to analyze this issue and to propose feasible mitigation measures for the Project.

3. **Inadequate Stacking On-Site at Project Driveways.**

3.8

Mr. Brohard concludes that the proposed driveway throats on-site (the distance between the roadway curb line and the first internal aisle parallel to the roadway) are very short and will not accommodate the 95th% queues of traffic exiting these driveways during the PM peak hour. The driveway access to Airport Boulevard (Intersection 9) provides about 40' for stacking (scaled from the site plan) whereas the calculations in the Traffic Study Appendices show that 62' is required to accommodate the 95th% queue. Similarly, the north, middle, and south driveway accesses to Devlin Road (Intersections 6, 7, and 8) each provide about 20' for stacking

whereas calculations in the Traffic Study Appendices show that 50', 65', and 49' respectively are required for the 95th% queues.

3.8
CONT. Providing inadequate driveway throats will block the internal aisles parallel to the adjacent roadways during the PM peak hour, causing congestion, delay, and potential queuing back into Airport Boulevard and Devlin Road for traffic entering the Project. Extending the driveway throats further into the site to accommodate the 95th% queues will require redesign of the internal circulation, and will also result in the loss of on-site parking. An EIR should be prepared to analyze these issues and to propose feasible mitigation measures for the Project.

4. Analysis of Cumulative Conditions Has Not Been Completed.

The Traffic Study indicates the County of Napa has not required an analysis of cumulative conditions as an area-wide traffic study is underway to accomplish this task and to update the County of Napa Traffic Impact Fee Program.

3.1 In a September 29, 2009 letter, Caltrans requested a cumulative analysis in accordance with their Guide for the Preparation of Traffic Impact Studies. In a March 3, 2010 letter, Caltrans reiterated "Our previous comments still apply and are incorporated here by reference." The recent Caltrans letter also requested AM and PM peak hour turning movement volumes for each study intersection under Project Only Conditions, 2030 Cumulative Conditions only, and 2030 Cumulative plus Project Conditions. The County appears to have ignored Caltrans' request for a cumulative impact analysis.

Without completion of the cumulative analysis in the area-wide study, it is not possible to determine what improvement measures will be needed, how much they will cost, whether they will be included in a future capital improvement program, if they will be constructed in a timely manner, or what the corresponding fees and the Project "fair shares" will be. Mr. Brohard concludes that there is at least a fair argument that the Project may have significant cumulative traffic impacts. An EIR should be prepared to analyze these issues and to propose feasible mitigation measures for the Project.

In addition, Mr. Brohard concludes that the Napa 34 Project will have significant cumulative impacts when considered together with the nearby and recently approved Napa Pipe Project, which will also generate significant new traffic at many of the same intersections as the Napa 34 Project. Nevertheless, the MND ignore these cumulative impacts entirely, in violation of CEQA.

An CEQA document must discuss significant cumulative impacts. CEQA Guidelines section 15130(a): This requirement flows from CEQA section 21083, which requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . '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." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines section 15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." CEQA Guidelines section 15355(a).

3.9
CONT.

"The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." *Communities for a Better Environment v. Cal. Resources Agency* ("CBE v. CRA"), (2002) 103 Cal.App.4th 98, 117. A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand. "Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." CEQA Guidelines § 15355(b).

As the court stated in *CBE v. CRA*, 103 Cal. App. 4th at 114:

Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact.

In *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d at 718, the court concluded that an EIR inadequately considered an air pollution (ozone) cumulative impact. The court said: "The [] EIR concludes the project's contributions to ozone levels in the area would be immeasurable and, therefore, insignificant because the [cogeneration] plant would emit relatively minor amounts of [ozone] precursors compared to the total volume of [ozone] precursors emitted in Kings County. The EIR's analysis uses the magnitude of the current ozone problem in the air basin in order to trivialize the project's impact." The court concluded: "The relevant question to be addressed in the EIR is not the relative amount of precursors emitted by the project when compared with preexisting emissions, but whether any additional amount of precursor emissions should be considered significant in light of the serious nature of the ozone problems in this air basin."² The *Kings County* case was recently reaffirmed in *CBE v. CRA*, 103

² *Los Angeles Unified v. City of Los Angeles*, 58 Cal.App.4th at 1024-1026 found an EIR inadequate for concluding that a project's additional increase in noise level of another 2.8 to 3.3 dBA was insignificant given that the existing noise level of 72 dBA already exceeded the regulatory recommended maximum of 70 dBA. The court concluded that this "ratio theory" trivialized the project's noise impact by focusing on individual inputs rather than their collective significance. The relevant issue was not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any

↑ Cal.App.4th at 116, where the court rejected cases with a narrower construction of “cumulative impacts.”

3.9
CONT. ↓ Similarly, in *Friends of Eel River v. Sonoma County Water Agency*, (2003) 108 Cal. App. 4th 859, the court recently held that the EIR for a project that would divert water from the Eel River had to consider the cumulative impacts of the project together with other past, present and reasonably foreseeable future projects that also divert water from the same river system. The court held that the EIR even had to disclose and analyze projects that were merely proposed, but not yet approved. The court stated, CEQA requires “the Agency to consider ‘past, present, and probable future projects producing related or cumulative impacts . . .’ (Guidelines, § 15130, subd. (b)(1)(A).) The Agency must interpret this requirement in such a way as to ‘afford the fullest possible protection of the environment.’” *Id.*, at 867, 869. The court held that the failure of the EIR to analyze the impacts of the project together with other proposed projects rendered the document invalid. “The absence of this analysis makes the EIR an inadequate informational document.” *Id.*, at 872.

The court in *Citizens to Preserve the Ojai v. Bd. of Supervisors*, 176 Cal.App.3d 421 (1985), held that an EIR prepared to consider the expansion and modification of an oil refinery was inadequate because it failed to consider the cumulative air quality impacts of other oil refining and extraction activities combined with the project. The court held that the EIR’s use of an Air District Air Emissions Inventory did not constitute an adequate cumulative impacts analysis. The court ordered the agency to prepare a new EIR analyzing the combined impacts of the proposed refinery expansion together with the other oil extraction projects.

Under both CEQA and the Guidelines, an EIR must be prepared when certain types of environmental impacts could result from a project. (Pub. Res. Code § 21083(a); CEQA Guidelines § 15065.) In effect, a finding by the lead agency that such conditions exist makes the project’s environmental effects “significant” as a matter of law. Under the Guidelines, an agency *must* find that a project may have a significant environmental effect, and thus prepare an EIR, if, *inter alia*, the possible environmental effects of the project are cumulatively considerable.³ (Pub. Res. Code § 21083(b)(2); CEQA Guidelines § 15065(c).)

The MND for the Napa 34 Project is similarly inadequate because it fails to analyze the cumulative impacts of the Napa 34 Project together with other nearby recently approved projects, particularly the recently approved Napa Pipe Project. Since the Napa Pipe project was found to have significant environmental impacts requiring an EIR, and since the Napa 34 Project

additional amount of traffic noise should be considered significant given the nature of the existing traffic noise problem.

³ “‘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 as defined in Section 15130.” (CEQA Guidelines § 15065(c).)

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CONT. ↑ contributes to many of the same impacts as the Napa Pipe Project (including at least, traffic, air quality, and greenhouse gases), the Napa 34 Project necessarily has significant cumulative impacts requiring an EIR. We hereby incorporate the draft and final EIRs and comments on the EIRs for the Napa Pipe Project herein by reference and ask that the County include the Napa Pipe draft and final EIR in the administrative record for the Napa 34 Project. An EIR must be prepared to analyze and mitigate these cumulative impacts.

5. Mitigation Measures Are Incomplete – The mitigation measures on Pages 34 and 35 of the Use Permit are incomplete.

3.10 ↓ An agency may only rely upon a mitigated negative declaration only when it has imposed mitigation measures that will eliminate all significant impacts of the project. (Pub. Res. Code §21064.5, 21080(c)(2); 14 Cal.Code Regs. §15064(f)(2), 15070(b); see *Perley v. Bd. of Sups.* (1982) 137 Cal.App.3d 424) A lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved. An agency may not rely on mitigation measures of uncertain efficacy or feasibility. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation because there was no evidence that replacement water was available)) This approach helps “insure the integrity of the process of decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug.” (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935) A lead agency may not conclude that an impact is significant and unavoidable without requiring the implementation of all feasible mitigation measures to reduce the impacts of a project to less than significant levels. (CEQA Guidelines §§ 15126.4, 15091)

Mr. Brohard has concluded that the following mitigation measures are inadequate to reduce the Napa 34 Project’s impacts to a level of insignificance. Therefore, an EIR is required to analyze these impacts and propose feasible and adequate mitigations.

- a) Mitigation Measure #10 - Pay Traffic Mitigation Fees: The MND relies on a County Traffic Impact Fee Program, but that Program is currently being updated and has not been completed. Payment of impact fees alone does not relieve the Project from mitigation of the significant traffic impacts that it will create in the near term and under cumulative conditions. The County may not rely on a mitigation fee program that has not been finalized to mitigate the significant impacts. This mitigation is therefore not adequate to reduce the impact to a level of insignificance and the impact therefore remains significant and must be addressed in an EIR.

Mitigation fees are not adequate mitigation unless the lead agency can show that the fees will fund a specific mitigation plan that will actually be implemented in its entirety. (*Napa Citizens for Honest Gov. v. Bd. Of Supervisors* (2001) 91 Cal.App.4th 342 (no evidence that impacts will be mitigated simply by paying a fee); *Anderson First Coal. v. City of Anderson* (2005) 130 Ca.App.4th 1173 (traffic mitigation fee is inadequate because it does not ensure that mitigation measure will

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CONT.

actually be implemented); *Kings Co. Farm Bureau v. Hanford* (1990) 221 Cal.App.3d 692. But see, *Save Our Peninsula Comm v. Monterey Co.* (2001) 87 Cal.App.4th 99 (mitigation fee allowed when evidence in the record demonstrates that the fee will fund a specific mitigation plan that will actually be implemented in its entirety); *California Native Plant Society v. County of El Dorado et al.* (2009) 170 Cal. App. 4th 1026 (fee program had to have gone through CEQA review for an agency to say that the payment of the fee alone is adequate CEQA mitigation); *Endangered Habitats League v. County of Orange* (2005); *Gray v. County of Madera* (2008).

In this case, the agency can not conclude that the mitigation fee will fund a specific program that will actually be implemented and that will actually fully mitigate the impact, since the mitigation program does not even exist yet. The MND therefore may not rely on the mitigation measure of uncertain efficacy.

Furthermore, a CEQA document may not rely upon a mitigation measure that will be developed after project approval. CEQA disallows deferring the formulation of mitigation measures to post-approval studies. (CEQA Guidelines § 15126.4(a)(1)(B); *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309.) An agency may only defer the formulation of mitigation measures when it possesses “‘meaningful information’ reasonably justifying an expectation of compliance.” (*Sundstrom* at 308; see also *Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1028-29 (mitigation measures may be deferred only “for kinds of impacts for which mitigation is known to be feasible”).) A lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation because there was no evidence that replacement water was available).) This approach helps “insure the integrity of the process of decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug.” (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.)

Moreover, by deferring the development of specific mitigation measures, the Applicant has effectively precluded public input into the development of those measures. CEQA prohibits this approach. As explained by the *Sundstrom* court:

An EIR [is] subject to review by the public and interested agencies. This requirement of “public and agency review” has been called “the strongest assurance of the adequacy of the EIR.” The final EIR must respond with specificity to the “significant environmental points raised in the review and consultation process.” . . . Here, the hydrological studies envisioned by the use permit would be exempt from this process of public and governmental scrutiny. (*Sundstrom*, 202 Cal.App.3d at 308.)

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The traffic mitigation fee program has not even been adopted yet. The MND therefore may not rely upon this post-approval mitigation measure to mitigate the Project's significant traffic impacts. An EIR is required to describe this mitigation measure to the public and explain how and whether it will adequately mitigate the Project's traffic impacts.

- b) Mitigation Measure #12: Airport Boulevard/Devlin Road Improvements: Mr. Brohard concludes that the improvements identified on Page 21 of the Traffic Study require the widening of Airport Boulevard from 72' to 86' between the outside curbs to implement the necessary westbound dual left turn lanes. Widening of the east leg of the intersection will also necessitate widening of the west leg for proper lane alignment across the intersection as well as transitions and tapers back to the existing 72' curb to curb width east and west of Devlin Road. Widening Airport Boulevard by 14' could result in the need for additional right of way, potentially on the north side of Airport Boulevard west of Devlin Road where the adjacent property has already been developed. The Traffic Study must evaluate the need for and the availability of the additional right of way to determine if this proposed mitigation measure is feasible. A CEQA document must analyze any foreseeable impacts that will be created by a mitigation measure itself. (*Perley v. Bd. of Supervisors, supra*)
- c) Mitigation Measure #13 – Soscol Ferry Road/Devlin Road Traffic Signal: Mr. Brohard concludes that page 21 of the Traffic Study indicates that the peak hour traffic signal warrant is exceeded in the PM peak hour when project traffic is added. The proposed mitigation measure states "...the permittee and his/her successors in interest shall contribute to the cost of signalization at the Soscol Ferry Road/Devlin Road intersection should the County deem it necessary to install traffic signals at that intersection at some point in the future." Mr. Brohard concludes that the Project's fair share of signalization should be calculated and the funds collected upon issuance of any building permits for the Project.
- d) Mitigation Measure #14 – Airport Boulevard/Devlin Road Traffic Signal: Mr. Brohard concludes that in addition to providing the northbound right turn green arrow overlap which will run concurrently with the westbound dual left turns, it will also be necessary to prohibit westbound to eastbound U-turns at this intersection to eliminate protected conflicting turning movements. Mr. Brohard concludes that this mitigation measure is therefore insufficient to reduce this impact to a level of insignificance and an EIR is therefore necessary to analyze the impact.
- e) Queuing Impacts Are Not Mitigated at Soscol Ferry Road/SR29, Soscol Ferry Road/Devlin Road, and Airport Boulevard/SR29/SR12: Pages 17 and 19 of the Traffic Study state that the Project will contribute to vehicle queuing problems at three intersections: Soscol Ferry Road/SR29, Soscol Ferry Road/Devlin Road, and Airport Boulevard/SR29/SR12. The Project should be required to pay a "fair share"

to mitigate queuing impacts at each of these three intersections as identified on Pages 17 and 19 of the Traffic Study. The CEQA document does not include mitigation measures to reduce this impact to a level of insignificance. An EIR is therefore required to analyze these impacts and propose feasible mitigations.

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- f) Mitigation Measures are Inconsistent with the Napa Pipe Project: Mr. Brohard concludes that the mitigation measures proposed for the Napa 34 Project are inconsistent with mitigation measures proposed for the nearby and recently approved Napa Pipe Project. This renders the mitigation measures inadequate and inconsistent. Both projects will impact many of the same intersections, yet the MND for Napa 34 ignores Napa Pipe entirely. This points out precisely why a cumulative impacts analysis is required.

Mr. Brohard reviewed the October 2009 Draft EIR and the Traffic Study for the Napa Pipe Project, a proposed development less than three miles to the North of the Napa 34 Holdings Commerce Center. Three common intersections were independently evaluated in the separate traffic studies for these two projects. All three intersections are forecast to be significantly impacted by the Napa Pipe Project for "Existing plus Project" conditions. Since both projects impact these same intersections, and the Napa Pipe EIR acknowledges that the impacts will be significant, then the Napa 34 Project necessarily has cumulatively significant impacts on these same intersections.

The Draft EIR proposes near-term mitigation for the Napa Pipe Project which is inconsistent with proposed near-term mitigation for the Napa 34 Holdings Commerce Center Project as follows:

- i. Soscol Ferry Road/Devlin Road – The Napa Pipe Draft EIR requires that this intersection be channelized so vehicle movements do not conflict and recommends against the installation of traffic signals. This proposed mitigation conflicts with Mitigation Measure #13 for Napa 34 Holdings Commerce Center which proposes a "fair share" of the cost of traffic signals. An EIR is therefore required to resolve these inconsistencies, analyze the impacts, and propose feasible mitigation.
- ii. Soscol Ferry Road/SR12/SR29/SR221 – The Napa Pipe Draft EIR identifies construction of a flyover for southbound traffic on SR221 continuing south on SR12/SR29 (a bridge over the intersection to remove this high peak hour left turn volume from the intersection). The Draft EIR requires Napa Pipe to contribute their "fair share" of these extensive improvements as mitigation.

According to Table 5 on Page 13 of the Traffic Study, Napa 34 Holdings Commerce Center increases delay by 6 seconds in the AM peak hour (already operating at LOS E) and adds traffic in the PM peak hour (already operating at LOS F). Mr. Brohard concludes that this should have been identified as a

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significant project traffic impact. In addition, Page 17 of the Traffic Study also states that the Project will contribute to vehicle queuing problems at the Soscol Ferry Road/SR12/SR29/SR221 intersection.

The Project should be required to pay a "fair share" to mitigate its significant traffic impacts and its queuing impacts at the Soscol Ferry Road/SR12/SR29/SR221 intersection. The CEQA document does not include mitigation measures to reduce these impacts to a level of insignificance. An EIR is therefore required to analyze these impacts and propose feasible mitigations.

- iii. Airport Boulevard/SR12/SR29 – The Napa Pipe Draft EIR identifies construction of a grade-separated interchange at this intersection as proposed in the Napa County General Plan. The Draft EIR requires Napa Pipe to contribute their "fair share" of these extensive improvements as mitigation.

As previously discussed in this letter, there is at least a "fair argument" that the baseline adjustments plus Project traffic will result in LOS E conditions (an increase of only 1.5 seconds of delay) at Airport Boulevard/SR29/SR12. Resulting delay of 55.1 seconds or more will change the AM peak hour intersection operation from LOS D to LOS E, creating a significant project traffic impact that requires mitigation (see Significance Criteria on Page 8 of the Traffic Study). Page 19 of the Traffic Study also states that the Project will contribute to vehicle queuing problems at the Airport Boulevard/SR29/SR12 intersection. Mitigation at this intersection will also require approval and concurrence from Caltrans.

The Project should be required to pay a "fair share" to mitigate its significant traffic impacts and its queuing impacts at the Airport Boulevard/SR29/SR12 intersection. The CEQA document does not include mitigation measures to reduce these impacts to a level of insignificance. An EIR is therefore required to analyze these impacts and propose feasible mitigations.

Mr. Brohard concludes that the Napa 34 Project will clearly have additional near-term and cumulative significant traffic impacts that should be studied through an EIR process. An EIR should be prepared and circulated for public comment to propose feasible and effective mitigation measures.

B. The Project will have Significant Adverse Impacts on Air Quality.

1. Construction Phase Air Emissions will be Significant.

Atmospheric Scientist, Dr. James Clark, Ph.D., concludes that the Napa 34 Project will have highly significant air quality impacts during the construction phase. The construction phase for the Project will extend over three years. Construction workers will be among the most significantly affected by construction phase emissions, since those workers will be in close proximity to construction equipment and other sources of construction phase pollution for the entire three year construction period, making this an issue of particular concern to Local 751.

Dr. Clark prepared a detailed air quality modeling analysis using the URBEMIS 2007 version 9.2.4 model that is required to be used by the Bay Area Air Quality Management District ("BAAQMD"). Dr. Clark's modeling shows that the modeling output set forth in the MND is erroneous and dramatically understates Project emissions, and that the Project will in fact have highly significant construction phase emissions.

Dr. Clark's model shows that the Project will have highly significant emissions of Reactive Organic Gases ("ROG") and Nitrogen Oxides ("NOx") during construction, and would exceed the applicable BAAQMD thresholds of significance. Dr. Clark calculates that ROG emissions during the second year of construction would exceed the BAAQMD's CEQA significance threshold value by nearly 10 times during the summer months of construction. The Project's ROG emissions will be 507.3 lbs/day, compared to a CEQA significance threshold of 54 lbs/day set forth in the BAAQMD's December 2009 CEQA Guidelines.⁴ Dr. Clark calculates that the daily emission value for NOx during the second year of construction is nearly double the BAAQMD CEQA significance threshold. The Project will generate 91 lbs/day of NOx, compared to a CEQA significance threshold of 54 lbs/day.

| Air Pollutant | Project Emissions | BAAQMD Threshold | Significant? |
|---------------|-------------------|------------------|--------------|
| ROG | 507.3 lbs/day | 54 lbs/day | Yes |
| NOx | 91 lbs/day | 54 lbs/day | Yes |

The MND fails entirely to quantify the Project's construction phase emissions, from construction equipment, earth-moving, grading, and worker commutes. The construction phase of this Project is projected to last three years. This is not a short-term construction phase that would warrant a lesser degree of scrutiny. Rather, the construction phase of this Project will be akin to a permanent emission source. The MND's failure to analyze this impact renders the document patently inadequate.

⁴ The Project's ROG and NOx emissions also exceed the BAAQMD's 1999 CEQA significance thresholds of 80 ppd for each pollutant.

Furthermore, since the impact is not analyzed, the MND fails to consider many feasible mitigation measures that could drastically reduce the Project's construction impacts. The MND treats the Project's construction emissions as a short-term impact that may be ignored. Dr. Clark concludes that given the long duration of construction, it is appropriate to apply the BAAQMD's CEQA significance thresholds for operational emissions, or the new BAAQMD CEQA significance thresholds for construction emissions, set forth above.

As a second approach, the MND could have compared construction emissions to significance thresholds established by other air districts that apply specifically to construction emissions. The table below clearly demonstrates that the Project's construction emissions, even after mitigation, far exceed significance thresholds adopted by other air districts.

Construction Phase CEQA Significance Thresholds

| Air District | Emissions Significance Thresholds (ton/year) | | | | |
|-----------------------|--|-------------|----|-------------|-------------|
| | ROG | NOx | CO | PM10 | PM2.5 |
| BAAQMD construction | 10 (54 ppd) | 10 (54 ppd) | - | 15 (80 ppd) | 10 (54 ppd) |
| SMAQMD construction | - | 11 | - | - | - |
| SCAQMD construction | 10 | 13 | 73 | 20 | 7 |
| SLOCAPCD construction | 24 | 10 | - | 7 | - |
| AVAQMD construction | 18 | 18 | 72 | 11 | - |
| SJVAPCD construction | 7 | 7 | - | - | - |
| MBUAPCD construction | - | - | - | 11 | - |
| Napa 34 Project | 507 ppd | 91 ppd | | | |

The construction emissions contained in the URBEMIS modeling runs exceed most construction emission significance thresholds by massive amounts. The Napa 34 Project therefore has significant construction air emissions that must be disclosed and analyzed in an EIR.

CEQA requires that an EIR must not only identify the impacts, but must also provide "information about how adverse the impacts will be." (*Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 831). The lead agency may deem a particular impact to be insignificant only if it produces rigorous analysis and concrete substantial evidence justifying the finding. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692). The MND for this Project fails to do so.

2. The MND Fails to Impose Feasible Mitigation Measures for Construction Emissions.

There are dozens of feasible mitigation measures that could reduce the Project's construction-phase impacts. However, since the MND erroneously concludes that the Project will not have significant construction emissions, the document failed to analyze these measures. Mitigation measures can dramatically reduce emissions of NOx and diesel engine exhaust, both

of which can have serious impacts on the health of construction workers. Diesel engine exhaust is a known human carcinogen that has been linked to an increased risk of lung cancer among construction workers, an issue of particular importance to the members of Local 751.

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Numerous control measures are available to reduce emissions of diesel particulate matter and other pollutants from construction equipment. Options include requiring the use of best practices in construction management and the use of newer equipment. Depending on the engine type of on-road or off-road equipment, the use of alternative fuels in combination with retrofit technologies, *e.g.*, diesel particulate filters, selective catalytic reduction, exhaust gas recirculation in new equipment can achieve emission reductions of up to 89% PM₁₀, 90% carbon monoxide ("CO"), 93% reactive organic gases ("ROG"), and 40% nitrogen oxides ("NO_x"). (California Air Resources Board, Currently Verified Technologies, <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>)

A combination of these options provides the greatest benefit and is frequently required as CEQA mitigation. For example, the Sacramento Metropolitan Air Quality Management District ("SMAQMD") requires as standard CEQA mitigation that all heavy-duty (>50 hp) off-road vehicles to be used in a construction project shall achieve a project-wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction. When the standard mitigation does not reduce the impact to below the threshold, the SMAQMD recommends a mitigation fee of \$16,000 per ton of emissions. A combination of mitigation measures should be required for Project construction to avoid adversely impacting sensitive receptors in the vicinity and contributing to the region's existing problems with high concentrations of diesel soot and ozone.

An EIR should be prepared to consider "clean fuels," such as, emulsified diesel, biodiesel, fuel borne-catalysts, compressed natural gas, liquefied natural gas, propane, ethanol, and methanol. The EIR should also consider retrofit controls. One of the most effective ways to reduce diesel pollution from existing equipment is to combine the cleaner fuels, with retrofit technology. Retrofit technologies can be geared towards PM or NO_x reduction, though many also reduce CO and hydrocarbon ("HC") emissions as well.

Retrofit technologies are available for a variety of applications, which could considerably reduce construction equipment exhaust emissions. For example, diesel oxidation catalysts, selective catalytic reduction, lean NO_x catalysts, and exhaust gas recirculation have been successfully retrofitted on off-road vehicles and these technologies offer opportunities to greatly reduce PM₁₀, CO, ROG, and NO_x emissions. In addition, many projects have demonstrated the feasibility of installing verified on-road technologies on construction equipment.

Retrofits are remarkably cost-effective when compared to other means of reducing air pollution. For example, the average cost for most applications of a diesel oxidation catalyst is approximately \$2,500 (excluding installation) and for a diesel particulate filter between \$7,000–12,000 (excluding installation). The California Air Resources Board ("CARB") estimates that the average cost of retrofitting an engine of 275 horsepower with a catalyzed diesel particulate

3-12
CONT. ↑ filter ranges between \$6,900–\$9,000. By comparison, the average base price for a 200 to 300-hp wheel loader is \$275,000. Retrofitting an engine with a catalyzed diesel particulate filter in this price range or with a \$2,500-diesel oxidation catalyst costs only a small fraction (2.5 to 3.2% and less than 1%, respectively) of the cost of replacing the entire vehicle with one that pollutes less.

These technologies have been required as mitigation measures for other projects and should be required for this Project to reduce its significant emissions from construction.

2. Operational Phase Air Emissions will be Significant.

3-13 ↓ Dr. James Clark, Ph.D., concludes that the air quality analysis used as a basis for the MND is deficient. The analysis fails to: (1) adequately screen the project impacts; (2) incorporate the latest regulatory guidance; (3) provide adequate documentation of modeling assumptions; (4) recognize the significance of emissions of particulate matter; (5) analyze potential health risks from diesel particulate matter emissions during project construction; (6) identify feasible mitigation and; (7) identify cumulative impacts. Therefore, a DEIR should be prepared to include a thorough evaluation of all air quality issues associated with the project.

The BAAQMD has adopted screening criteria to determine if a proposed project may have significant air quality impacts for CEQA purposes. The MND ignores the BAAQMD CEQA screening criteria entirely. Dr. Clark explains that the Napa 34 Project exceeds several of the BAAQMD CEQA screening criteria, and that there is therefore a fair argument that the Project may have significant air quality impacts that must be analyzed in an EIR.

BAAQMD screening criteria identified in the BAAQMD's 1999 and 2009 CEQA Guidelines, were developed in order to provide lead agencies and project applicants with a conservative indication of whether proposed project could result in potentially significant air quality impacts⁵. In the 1999 Guidelines, BAAQMD provides a list of projects that are likely to produce potentially significant emissions of NO_x based upon the size of the project, including Office Parks.

⁵ Bay Area Air Quality Management District, CEQA Guidelines December 2009, p. 3-1

Projects With Potentially Significant Emissions⁶

| Land Use Category | Trip Generation Rate | Size of Project Likely to Generate 80 lb/day NOx |
|-------------------|----------------------|--|
| Office | | |
| General Office | 10.9/1,000 sq. ft. | 280,000 sq. ft. |
| Government Office | 68.9/1,000 sq. ft. | 55,000 sq. ft. |
| Office Park | 12.8/1,000 sq. ft. | 210,000 sq. ft. |
| Medical Office | 37.1/1,000 sq. ft. | 110,000 sq. ft. |

The 2009 Guidelines include operational and construction related screening sizes for criteria pollutant and greenhouse gas emissions from typical projects including office parks and warehouses.

Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes⁷

| Land Use Type | Operational Criteria Pollutant Screening Size | Operational GHG Screening Size | Construction-Related Screening Size |
|---------------|---|--------------------------------|-------------------------------------|
| Office Park | 323,000 sq. ft (NOx) | 50,000 sq. ft | 277,000 sq. ft (ROG) |
| Warehouse | 864,000 sq. ft (NOx) | 64,000 sq. ft | 259,000 sq. ft (NOx) |

Based on the 1999 BAAQMD guidance, the proposed Napa 34 project, estimated to be approximately 459,000 square feet of warehouse and office space, is twice as large as the "Office Park" project listed having significant air quality impacts. Based on the 2009 BAAQMD guidance, the Napa 34 project will have significant NOx and GHG issues during construction

⁶ BAAQMD. 1999. BAAQMD CEQA Guidelines. December, 1999. pg 25.

⁷ BAAQMD. 2009. CEQA Guidelines. Table 3-1. December 2009, p. 3-2

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CONT. and operation when compared to comparable projects that would include office parks and warehouses. When a project exceeds an applicable CEQA significance threshold, such as the BAAQMD screening thresholds, there is a fair argument that the project may have significant environmental impacts and an EIR is required. Since the Napa 34 Project exceeds the BAAQMD CEQA screening thresholds, there is a fair argument that the Project will have significant NOx and GHG impacts and an EIR is required to analyze and mitigate these impacts.

The MND failed to incorporate any analysis of this guidance. A DEIR should be prepared to include a comparison of the project to the guidance and to conduct an appropriate analysis of project impacts and identify mitigation, where warranted.

3. Greenhouse Gas Emissions will be Significant.

3.14 Dr. Clark concludes that the Project will have significant greenhouse gas ("GHG") emissions in excess of relevant CEQA significance thresholds. The MND concludes that the Napa 34 Project will generate 1,896 metric tons ("MT") per year of CO₂ during the operation phase of the project. This exceeds substantially the BAAQMD's significance threshold for GHG of 1,100 MT CO₂e/yr, which is a numeric emissions level above which a project's contribution to global climate change is considered to be "cumulatively considerable."

The Bay Area Air Quality Management District ("BAAQMD") has proposed a CEQA significance threshold of 1,100 metric tons per year of CO₂-equivalent⁸ greenhouse gas emissions (CO₂e/year). Projects that generate this level of GHG emissions would have significant impacts under CEQA. (See, BAAQMD, CEQA Guidelines Update (Dec. 7, 2009).) Specifically, the BAAQMD is suggesting that development projects which will emit less than 1,100 metric tons per year of CO₂e may be considered to have a less than significant impact relative to GHG emissions (both individually and cumulatively).

In this case, the Project's 1896 MT of GHG substantially exceeds the BAAQMD CEQA significance threshold of 1100 MT. The Project therefore has significant greenhouse gas impacts requiring CEQA review.

The BAAQMD approach is consistent with that adopted by many other agencies. The San Diego Air Pollution Control District has adopted a draft CEQA significance threshold of 900

⁸ Carbon dioxide equivalency is a quantity that describes, for a given mixture and amount of greenhouse gas, the amount of CO₂ that would have the same global warming potential, when measured over a specified timescale (generally, 100 years). Carbon dioxide equivalency thus reflects the time-integrated radiative forcing of a quantity of *emissions* or rate of greenhouse gas emission - a *flow* into the atmosphere - rather than the instantaneous value of the radiative forcing of the *stock* (concentration) of greenhouse gases *in the atmosphere* described by CO₂e. For example, the global warming potential for methane over 100 years is 25 and for nitrous oxide 298. This means that emissions of 1 million metric tons of methane and nitrous oxide respectively are equivalent to emissions of 25 and 298 million metric tons of carbon dioxide.

metric tons of CO₂e per year. The Project's emissions vastly exceed that threshold. (*See also*, California Air Pollution Control Officers Association ("CAPCOA") White Paper on CEQA and Greenhouse Gases, suggesting a CEQA threshold of 900 metric tons of CO₂e per year.)⁹

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CONT. Despite this clear exceedance of the applicable CEQA significance threshold, the MND attempts to use a different methodology to dismiss the impact. BAAQMD proposes an efficiency-based threshold of 4.6 MTA CO₂ per person ("persons" is arrived at by adding project employment to project residential development). However, the BAAQMD draft guidelines caution:

In applying the efficiency-based threshold of 4.6 MT/Yr CO₂e (per person) the lead agency might also wish to consider the project's total emissions. Where a project meets the efficiency threshold but would still have very large greenhouse gas emissions the lead agency may wish to consider that the project's contributions to climate change might still be cumulatively considerable.

In this case, the Project's GHG emissions of 1896 MT/yr r far exceed the BAAQMD threshold of either 1100 MT/yr. Dr. Clark concludes that this is a significant impact.

Furthermore, the MND points out that the Napa County General Plan Update EIR (June 2008) concluded that development in the County would have significant and unavoidable GHG

⁹ To the extent that the County argues that the lack of regulatory guidance for GHG excuses the MND's lack of analysis, this argument is without merit. While there is currently little regulatory guidance of evaluating greenhouse gases, this does not relieve a lead agency of its statutory obligation under CEQA to determine whether or not a project's impacts are significant, and to impose feasible mitigation measures and alternatives. Significance thresholds are only "encouraged" under CEQA and are not a prerequisite to an impact analysis. (Guidelines § 15064.7.) In the absence of final thresholds and standards, lead agencies must rely on their own "careful judgment ... based to the extent possible on scientific and factual data" in determining whether a project's global warming-related impacts are significant. (Guidelines §15064(b); see also *Mira Mar Mobile Community v. City of Oceanside*, 119 Cal. App. 4th 477, 493 (2004) ("[A] lead agency must necessarily make a policy decision in distinguishing between substantial and insubstantial adverse environment impacts".) The court in *Keep Berkeley Jets Over the Bay* made clear that where there is not a "universally accepted" methodology, a lead agency must still "disclose all it can" about project's impacts and evaluate those methodologies that are available. (91 Cal. App. 4th at 1370.)

Indeed numerous agencies have analyzed greenhouse gas impacts and proposed mitigation measures for other projects, such as the Chevron Richmond Refinery expansion, and the ConocoPhillips Rodeo refinery expansion. Such analysis and mitigation is clearly feasible even in the absence of regulatory guidance. Under CEQA the lead agency must still make "a good faith effort" to fully disclose what they can about project impacts by providing data on emissions and use their own "careful judgment ... based to the extent possible on scientific and factual data" to determine whether the project's greenhouse gas impacts were significant. (Guidelines §§ 15151, 15064(b).) The MND fails to meet these standards.

impacts. (MND, p. 13) The MND then proceeds to dismiss the Napa 34 Project's GHG impacts as insignificant. This analysis is legally erroneous. Once an impact has been identified as significant in a prior CEQA document, that same impacts must be acknowledged as significant in subsequent CEQA documents – not the reverse. The courts have recently held that a lead agency may not rely on a prior CEQA document's statement of overriding considerations to avoid CEQA review for a later project. The court in *CBE v. CRA* stated:

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Under CEQA section 21081, an agency approving a project with significant environmental effects must find that each effect will be mitigated or avoided, or "that *specific* overriding economic, legal, social, technological, or other benefits of *the project* outweigh the . . . effect[]" n65 The requirement of a statement of overriding considerations is central to CEQA's role as a public accountability statute; it requires public officials, in approving environmentally detrimental projects, to justify their decisions based on counterbalancing social, economic or other benefits, and to point to substantial evidence in support. n66 Under Guidelines section 15152(f)(3)(C) [overturned by the Court], however, an agency apparently could adopt one statement of overriding considerations for a prior, more general EIR, and then avoid future political accountability by approving later, more specific projects with significant unavoidable impacts pursuant to the prior EIR and statement of overriding considerations. Even though a prior EIR's *analysis* of environmental effects may be subject to being incorporated in a later EIR for a later, more specific project, the responsible public officials must still go on the record and explain specifically why they are approving the later project despite *its* significant unavoidable impacts."

(2002) 103 Cal. App. 4th 98 at 124-125.

This is precisely the legal error that the MND is committing. It is relying on a statement of overriding considerations from a General Plan EIR to avoid imposing new mitigations or issuing a new statement of overriding considerations for the Napa 34 Project, despite its admitted significant impacts. The MND's process is inappropriate because "the responsible public officials must still go on the record and explain specifically why they are approving the later project despite *its* significant unavoidable impacts."

Next, the MND proceeds to rely on a GHG mitigation program that has not yet been developed or approved. The MND states, "Napa County is currently developing an emission reduction plan." (MND, p. 13) As discussed above, the MND may not rely on mitigation plans that have not been developed, or that will be developed after project approval. It is therefore improper for the MND to rely on this post-approval mitigation plan that may or may not ever be adopted and that may or may not adequately mitigate the Project's significant GHG impacts.

Finally, there can be no question that the Napa 34 Project's GHG impacts are cumulatively significant together with the Napa Pipe Project.

3.14
CONT. ↑ The Project therefore has significant GHG impacts requiring CEQA review and the MND does not propose adequate mitigation to reduce these impacts to a level of insignificance. An EIR is therefore required.

4. The Project's Odor Impacts will be Significant.

3.15 ↓ Dr. Clark concludes that the Napa 34 Project will have significant odor impacts. The MND failed to consider the presence of the Napa Sanitation District Soscol Wastewater Treatment Plant, located at 1515 Soscol Ferry Road. The facility is located approximately 1 mile northwest of the proposed project. According to the Napa Sanitation District, the facility is a 15 million gallon per day (mgd) treatment plant that includes preliminary treatment (screening), primary treatment (clarifiers), biological secondary treatment (340 acres of oxidation ponds and/or activated sludge facilities), secondary clarification or sedimentation, sand filtration, chlorination, sludge digestion and solids de-watering facilities.

According to BAAQMD's CEQA Guidelines, a project is presumed to have significant odor impacts if people are to be located within two-miles of a wastewater treatment facility. Odor impacts include placing worksites within the odor impact screening distance. Since the Napa 34 Project exceeds the BAAQMD CEQA significance threshold for odor, it has a significant impact that must be analyzed in an EIR.

Dr. Clark explains that odor impacts can have significant impacts on human health and well-being. Dr. Clark cites scientific literature finding that unpleasant odors can impair mood leading to increased levels of tension, depression, anger, fatigue and confusion. Conditioned aversions may play a role in perceptions and health symptoms induced by malodors. If a malodor has been previously associated with health symptoms, the odor alone may subsequently recreate these symptoms in the absence of the allergy. Ambient odors can provoke a wide distribution of reactions. Variations are most often attributed to differences in individual sensitivity. Behavioral responses for a single individual and among individuals exposed to the same odor over time can be greatly varied. Cognitive processes may be modifying the over perception of odor exposure. Some individuals may exhibit extreme sensitivity and adaptation to environmental odors does not occur.

Dr. Clark points to a 2008 study on residents living near industrial hog operations which found that odors from the facilities restricted residents' activities to an extent that may affect health. Odors were found to restrict social activities, outdoor activities, and effect sleeping patterns. Research has shown that residents in rural communities perceive environmental barriers as reasons for inactivity and inactivity can have a major impact on a person's physical health. Another study found that malodor reported in communities near swine operations originated from the operations. The study found that odor ratings were related to temperature, PM10, semi volatile PM10 and hydrogen sulfide concentration. The odds of reporting a change in daily activities due to odor increased 62% for each unit increase in average odor during a 12 hour period.

3.15
CONT^a ↑ Clearly, placing the Napa 34 Project one mile from a sewage treatment plant creates a significant odor impact that must be disclosed and analyzed in an EIR.

5. Cumulative Air Emissions will be Significant.

3.16 ↓ The Napa 34 project will have significant cumulative impacts together with the nearby Napa Pipe Project. The two projects, only two miles apart, will obviously be contributing to the same air pollution, including ROG, NOx, PM, GHG and other pollutants. Since the Napa Pipe Project has admittedly significant air quality impacts, and the Napa 34 Project will be adding cumulatively to that pollution, the Napa 34 Project therefore necessarily has significant cumulative air quality impacts.

C. The Project will have Significant Adverse Impacts on Water Supply.

As discussed in comment letters from the City of American Canyon, the Project will have significant adverse water supply impacts. The City of American Canyon, which will be supplying water for the Project, has adopted a Zero Water Footprint policy to protect its water supply and reliability. However, the City has found that the Napa 34 Project does not comply with the Zero Water Footprint policy. The Project will therefore have a significant adverse environmental impact that must be analyzed in an EIR.

3.17 ↓ The Water Supply Report prepared by the City of American Canyon concludes that the Project will generate a total annual demand for water equal to 10,800 gallons per day or 12 acre feet per year (AFY). (City of American Canyon, Water Supply Report, p. 3)

The Water Supply Report (p.5) states as follows:

PROJECT'S IMPACT ON RELIABILITY

The Urban Water Management Plan finds that, as of 2005, the City of American Canyon would experience a shortfall in water supplies in multiple-dry-years of up to 427 acre feet and single-dry-years of up to 897 acre feet. Due to increased demand, the shortfall would worsen even as additional supplies are obtained. By the year 2015, the City of American Canyon would experience a shortfall in multiple-dry-years of up to 1,037 acre feet and in single-dry-years of up to 1,557 acre feet. By contributing to the shortfall, *the project would reduce the reliability of American Canyon water service.*

PROJECT'S WATER FOOTPRINT

The project does not have a zero water footprint. Staff has determined that it will result in a loss in water service reliability. Therefore in accordance with Chapter 13.10 of the City Municipal Code the applicant shall pay to the City a monthly service charge in the amount of \$4.25/100 cubic feet. This represents the project's costs associated with City supplying water through the City's connection to the City of Vallejo. (Emphasis added)

↑ The City of American Canyon further explains the Project's impacts on the already dire water supply problem:

The Urban Water Management Plan finds that, as of 2005, the City of American Canyon would experience a shortfall in water supplies in multiple-dry-years of up to 427 acre feet and single-dry-years of up to 897 acre feet. Due to increased demand, the shortfall would worsen even as additional supplies are obtained. By the year 2015, the City of American Canyon would experience a shortfall in multiple-dry-years of up to 1,037 acre feet and in single-dry-years of up to 1,557 acre feet. By contributing to the shortfall, *the project would reduce the reliability of American Canyon water service.*

(City of American Canyon, Water Supply Report, p. 5 (Oct. 14, 2009) (Emphasis added))

3.17
CONT. Since the Napa 34 Project will not comply with the American Canyon Zero Water Footprint policy, and will cause and contribute to "a loss in water service reliability," the Project will have significant adverse environmental impacts that must be analyzed and mitigated in an EIR.

As explained by the City of American Canyon, when, as here, a project has significant impacts on water supply, an EIR is required to analyze this impact and propose feasible mitigations:

As a result of *Vineyard Area Citizens for Responsible Growth v. Rancho Cordova* (2007) 40 Cal.4th 412, the lead agency as defined under CEQA, here the County, in its environmental review of a development project, including what is currently proposed by the Applicant, must at a minimum accomplish an environmental review under CEQA that: (a) presents sufficient facts to evaluate the pros and cons of supplying the water that the project will need; (b) presents an analysis that assumes that all phases of the project will be built and will need water, and includes an analysis to the extent reasonably possible of the consequences of the impacts of providing water to the entire project; and (c) where it is impossible to determine that anticipated future water sources will be available, some discussion of possible replacement sources or alternatives to use of anticipated water and of the environmental consequences of those impacts must be presented. *Vineyard*, 40 Cal.4th 430-434.

(Letter from M. Thorne, American Canyon Public Works Director to H. Gitleman (Dec. 16, 2009), p. 2)

CEQA requires the lead agency to analyze the impacts of a project in reference to relevant planning documents, including plans related to air and water. (CEQA Guidelines, App. G, Evaluation of Environmental Impacts, Item 6.) A CEQA document must discuss any inconsistencies that exist between a proposed project and any applicable local or regional plans. (CEQA Guidelines § 15125(d).) This discussion is mandatory under CEQA. The same analysis must be conducted when a lead agency elects to use a negative declaration to evaluate the

↓

3.17
CONT.

significant environmental impacts that may be caused by a project. (CEQA Guidelines, App. G.) A Project's inconsistencies with local plans and policies constitute significant impacts under CEQA. (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 32 Cal.Rptr.3d 177; see also, *County of El Dorado v. Dept. of Transp.* (2005) 133 Cal.App.4th 1376 (fact that a project may be consistent with a plan, such as an air plan, does not necessarily mean that it does not have significant impacts).)

The MND is legally deficient because it fails to analyze and mitigate the Project's inconsistencies with the American Canyon Zero Water Footprint policy. Although the City of American Canyon proposes a mitigation fee for the water supply impact, such a fee does not constitute adequate mitigation, and an EIR is still required to disclose the impact and consider concrete and feasible mitigations and alternatives. Mitigation fees are not adequate mitigation unless the lead agency can show that the fees will fund a specific mitigation plan that will actually be implemented in its entirety. *Napa Citizens for Honest Gov. v. Bd. Of Supervisors* (2001) 91 Cal.App.4th 342 (no evidence that impacts will be mitigated simply by paying a fee); *Anderson First Coal. v. City of Anderson* (2005) 130 Cal.App.4th 1173 (traffic mitigation fee is inadequate because it does not ensure that mitigation measure will actually be implemented); *Kings Co. Farm Bureau v. Hanford* (1990) 221 Cal.App.3d 692. But see, *Save Our Peninsula Comm v. Monterey Co.* (2001) 87 Cal.App.4th 99 (mitigation fee allowed when evidence in the record demonstrates that the fee will fund a specific mitigation plan that will actually be implemented in its entirety). *California Native Plant Society v. County of El Dorado et al.* (2009) 170 Cal. App. 4th 1026, held that the fee program had to have gone through CEQA review for an agency to say that the payment of the fee alone is adequate CEQA mitigation. (See also, *Endangered Habitats League v. County of Orange* (2005); *Gray v. County of Madera* (2008)) Here, there is no evidence that the mitigation fee will fund a program that will actually be implemented and that will actually mitigate the serious water supply impact. Therefore, the mitigation fee does not reduce this impact to a level of insignificance and an EIR is required to analyze the impact.

D. The Project Will Have Significant Stormwater Impacts.

3.18

Hydrogeologist Matthew Hagemann, MS, PG, concludes that the Project will have significant adverse impacts on stormwater pollution that must be analyzed in an EIR. The MND states, on p. 24, that less than significant impacts would be associated with the following issues (VII, Hydrology and Water Quality Impacts):

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

However, a July 15, 2009 letter from the applicant's consultant to Napa County, states that post-development flow will exceed pre-development volumes.¹⁰ The 2010 Stormwater Management Plan also states that post-development flow will exceed pre-development volumes.¹¹ The MND makes no mention that post-development stormwater runoff will exceed predevelopment flows.

A waiver request for exceeding the predevelopment flows was the subject of the July 15, 2009 letter. No documentation on the disposition of the waiver request was available in the records reviewed for the preparation of this letter. However, the 2010 Stormwater Management Plan did not include any mention that a waiver was obtained from the County, so we have assumed that a waiver was not granted.

In contrast to the findings in the MND, as cited above, Mr. Hagemann concludes that an exceedance of pre-development stormwater runoff should be considered as a significant unmitigated impact. Therefore, a DEIR should be prepared to include a thorough evaluation of all practicable measures to reduce stormwater runoff from the project site. If, after this evaluation, the runoff is still predicted to exceed pre-development volumes, a quantitative evaluation of all feasible best management practices ("BMPs") should be conducted to conform to Napa County Post-Construction Runoff Management requirements.

Additionally, Mr. Hagemann explains that because groundwater is approximately 10 feet below ground surface, the evaluation of BMPs included in a DEIR should consider protection of the underlying beneficial uses of the groundwater. Any BMPs that would discharge stormwater to the subsurface in a "bioretention strip" (as proposed in the 2010 Stormwater Management Plan, p. 9) cannot cause or contribute to an exceedance of applicable groundwater quality objectives as established in the RWQCB "Basin Plan" for the Napa area.

¹⁰ Letter from TLA Engineering and Planning, to Erich Kroll, Napa County Department of Public Works, July 15, 2009

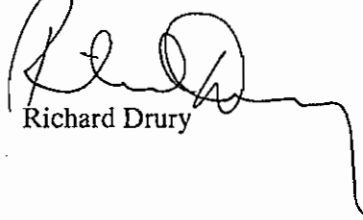
¹¹ Napa Commerce Center Stormwater Management Plan, March 2010

3.18
CONT.

V. CONCLUSION

3.19 For the foregoing reasons, Local 751 and Mr. Dan Digardi respectfully request that the County not approve the proposed Mitigated Negative Declaration, require preparation of an Environmental Impact Report for the Project, and refrain from issuing any Project approvals unless and until an EIR is circulated for public comment and certified as complete, including implementation of all feasible mitigation measures and alternatives. We request written notice of any actions, hearings or decisions related to this Project. Thank you for considering our comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Drury', with a long horizontal line extending to the right.

Attachments:

- Comments of Thomas Brohard, PE
- Comments of Matthew Hagemann, MS, PG, and Dr. James Clark, Ph.D.

EXHIBIT A

Tom Brohard and Associates

April 19, 2010

Mr. Richard Drury, Attorney at Law
Lozeau/Drury LLP
1516 Oak Street, Suite 216
Alameda, California 94501

SUBJECT: Review of the Mitigated Negative Declaration, Initial Study Checklist, Use Permit, and Final Traffic Impact Analysis for the Napa 34 Holdings Commerce Center in the County of Napa – Traffic Issues

Dear Mr. Drury:

Tom Brohard, P.E., has reviewed the March 17, 2010 Mitigated Negative Declaration (MND), the Initial Study Checklist, Use Permit, and related documents prepared for the proposed Napa 34 Holdings Commerce Center (Project) in the County of Napa. The Omni-Means February 2010 Final Traffic Impact Analysis (Traffic Study) for the Project has also been reviewed.

In summary, further study must be undertaken to properly identify the traffic impacts of the Project. Until the various issues and concerns raised in this letter are addressed, I disagree that the Project's traffic impacts have a less than significant effect on the environment with mitigation, and there is at least a "fair argument" that the Project may have adverse environmental impacts. An environmental impact report (EIR) should be prepared for the Project to analyze the issues outlined in this letter and to propose feasible mitigation measures.

Education and Experience

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 40 years of professional engineering experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and now serve as the City Traffic Engineer for the City of Indio and as Consulting Transportation Engineer for the City of Big Bear Lake, City of Mission Viejo, and the City of San Fernando. I have extensive experience in traffic engineering and transportation planning. During my career in both the public and private sectors, I have reviewed numerous environmental documents and traffic studies for various projects. Several recent assignments are highlighted in the enclosed resume.

Project Description

Page 1 of the Notice of Intent to Adopt a Mitigated Negative Declaration describes the Napa 34 Holdings Commerce Center as:

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885 Fax (760) 398-8897
Email tbrohard@earthlink.net

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"An industrial park totaling approximately 490,500 square feet of new development in eight buildings... Approximately 73% percent (or +/- 356,000 square feet) of the total development floor area would be dedicated to warehousing uses, while the remaining 27 percent (or +/- 134,500 square feet) would be utilized as office space. Access would be provided from three new driveways located off an extension of Devlin Road south of the existing Devlin Road/Airport Boulevard intersection and a single right-in right-out driveway off Airport Boulevard. Roadway improvements, including road construction at Devlin Road and road widening at Airport Boulevard are also proposed. Parking for 740 vehicles is to be provided on-site, along with six loading docks."

Traffic Issues

Based on the information provided in the Initial Study Checklist, Use Permit, Traffic Study, and related documents for the Napa 34 Holdings Commerce Center, my review indicates the following traffic issues and areas of concern:

- 1) Analysis of Near Term Conditions Is Flawed – From the July 21, 2009 application for the Project, construction of the industrial park will be phased, with Phase 1 to be completed in 12 months and Phase 2 to be completed in 24 months. Therefore, it will be at least two more years before the Project is completed and occupied. The two analyses in the Traffic Study were done for existing conditions based on June 2009 traffic counts, and then for near term conditions, assuming completion of the Project and the approved Greenwood Business Park directly across Devlin Road opposite the Project. To properly assess near-term conditions and impacts, the baseline volumes used in the Traffic Study must be revised as follows:
 - a) Adjust Traffic Counts to a Thursday in August - Increase the existing AM and PM peak hour traffic counts made on Tuesday June 2, 2009, Wednesday June 3, 2009, and Thursday June 4, 2009 to reflect worst case conditions on a Thursday in August, a practice utilized by the City of Napa immediately adjacent to the study intersections.
 - b) Adjust Baseline Volumes for Annual Ambient Growth - Include an annual ambient growth factor to account for small projects as well as general traffic growth between the June 2009 traffic counts and project completion (at least two years from now), so add in three years of annual ambient growth to the adjusted traffic volumes for a Thursday in August.
 - c) Adjust Baseline Volumes to Include Trips for All Other Approved Projects - Include traffic from all other approved but not yet completed and occupied projects in the area that will contribute traffic to the study intersections.

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Correcting these three errors above will increase the June 2009 traffic counts to correspond to traffic volumes at Project completion in Year 2012. The resulting traffic volumes would represent a Thursday in August (utilizing the same methodology as the adjacent City of Napa), reflect traffic to and from small projects as well as annual ambient traffic growth, and account for traffic to and from other approved but not yet constructed or occupied projects (in addition the approved Greenwood Business Park). Project traffic can then be added to this adjusted baseline that better represents traffic volumes in Year 2012, and this will then enable the significant Project traffic impacts to be properly determined and analyzed. There is at least a fair argument that the addition of project traffic to the higher baseline volumes may have an adverse impact on traffic flow (see below). These impacts should be analyzed in an EIR and additional mitigation measures adopted as required for the Project.

- 2) An Additional Significant Impact Will Occur With Baseline Adjustments – Without making the baseline adjustments above, Table 5 on Page 13 of the Traffic Study indicates delay at Airport Boulevard/SR29/SR12 in the AM peak hour will increase from 41.4 seconds to 53.6 seconds.

With the upper threshold of Level of Service (LOS) D at 55.0 seconds, there is at least a “fair argument” that the adjustments above plus Project traffic will result in LOS E conditions (an increase of only 1.5 seconds of delay) at Airport Boulevard/SR29/SR12. Resulting delay of 55.1 seconds or more will change the AM peak hour intersection operation from LOS D to LOS E, creating a significant project traffic impact that requires mitigation (see Significance Criteria on Page 8 of the Traffic Study). Mitigation at this intersection will also require approval and concurrence from Caltrans. An EIR should be prepared to analyze this issue and to propose feasible mitigation measures for the Project.

- 3) Inadequate Stacking On-Site at Project Driveways – The proposed driveway throats on-site (the distance between the roadway curb line and the first internal aisle parallel to the roadway) are very short and will not accommodate the 95th% queues of traffic exiting these driveways during the PM peak hour. The driveway access to Airport Boulevard (Intersection 9) provides about 40' for stacking (scaled from the site plan) whereas the calculations in the Traffic Study Appendices show that 62' is required to accommodate the 95th% queue. Similarly, the north, middle, and south driveway accesses to Devlin Road (Intersections 6, 7, and 8) each provide about 20' for stacking whereas calculations in the Traffic Study Appendices show that 50', 65', and 49' respectively are required for the 95th% queues.

Providing inadequate driveway throats will block the internal aisles parallel to the adjacent roadways during the PM peak hour, causing congestion, delay, and potential queuing back into Airport Boulevard and Devlin Road for traffic

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entering the Project. Extending the driveway throats further into the site to accommodate the 95th% queues will require redesign of the internal circulation, and will also result in the loss of on-site parking. An EIR should be prepared to analyze these issues and to propose feasible mitigation measures for the Project.

- 4) Analysis of Cumulative Conditions Has Not Been Completed – The Traffic Study indicates the County of Napa has not required an analysis of cumulative conditions as an area-wide traffic study is underway to accomplish this task and to update the County of Napa Traffic Impact Fee Program.

In their September 29, 2009 letter, Caltrans requested a cumulative analysis in accordance with their Guide for the Preparation of Traffic Impact Studies. In their March 3, 2010 letter, Caltrans reiterated "Our previous comments still apply and are incorporated here by reference." The recent Caltrans letter also requested AM and PM peak hour turning movement volumes for each study intersection under Project Only Conditions, 2030 Cumulative Conditions only, and 2030 Cumulative plus Project Conditions.

Without completion of the cumulative analysis in the area-wide study, it is not possible to determine what improvement measures will be needed, how much they will cost, whether they will be included in a future capital improvement program, if they will be constructed in a timely manner, or what the corresponding fees and the Project "fair shares" will be. There is at least a fair argument that the Project may have significant cumulative traffic impacts. An EIR should be prepared to analyze these issues and to propose feasible mitigation measures for the Project.

- 5) Mitigation Measures Are Incomplete – The mitigation measures on Pages 34 and 35 of the Use Permit are incomplete and inadequate as follows:
- a) Mitigation Measure #10 - Pay Traffic Mitigation Fees – The County Traffic Impact Fee Program is currently being updated but, as discussed above, this process has not been completed. Payment of impact fees alone does not relieve the Project from mitigation of the significant traffic impacts that it will create in the near term and under cumulative conditions. The County may not rely on a mitigation fee program that has not been finalized to mitigate the significant impacts. This mitigation is therefore not adequate to reduce the impact to a level of insignificance and the impact therefore remains significant and must be addressed in an EIR.
 - b) Mitigation Measure #12 – Airport Boulevard/Devlin Road Improvements – The improvements identified on Page 21 of the Traffic Study require the widening of Airport Boulevard from 72' to 86' between the outside curbs to implement the necessary westbound dual left turn lanes. Widening of the

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east leg of the intersection will also necessitate widening of the west leg for proper lane alignment across the intersection as well as transitions and tapers back to the existing 72' curb to curb width east and west of Devlin Road. Widening Airport Boulevard by 14' could result in the need for additional right of way, potentially on the north side of Airport Boulevard west of Devlin Road where the adjacent property has already been developed. The Traffic Study must evaluate the need for and the availability of the additional right of way to determine if this proposed mitigation measure is feasible.

- c) Mitigation Measure #13 – Soscol Ferry Road/Devlin Road Traffic Signal – Page 21 of the Traffic Study indicates that the peak hour traffic signal warrant is exceeded in the PM peak hour when project traffic is added. The proposed mitigation measure states "...the permittee and his/her successors in interest shall contribute to the cost of signalization at the Soscol Ferry Road/Devlin Road intersection should the County deem it necessary to install traffic signals at that intersection at some point in the future." The Project's fair share of signalization should be calculated and the funds collected upon issuance of any building permits for the Project.
 - d) Mitigation Measure #14 – Airport Boulevard/Devlin Road Traffic Signal – In addition to providing the northbound right turn green arrow overlap which will run concurrently with the westbound dual left turns, it will also be necessary to prohibit westbound to eastbound U-turns at this intersection to eliminate protected conflicting turning movements. This mitigation measure is therefore insufficient to reduce this impact to a level of insignificance and an EIR is therefore necessary to analyze the impact.
 - e) Queuing Impacts Are Not Mitigated – Pages 17 and 19 of the Traffic Study state that the Project will contribute to vehicle queuing problems at three intersections: Soscol Ferry Road/SR29, Soscol Ferry Road/Devlin Road, and Airport Boulevard/SR29/SR12. The Project should be required to pay a "fair share" to mitigate queuing impacts at each of these three intersections as identified on Pages 17 and 19 of the Traffic Study. The CEQA document does not include mitigation measures to reduce this impact to a level of insignificance. An EIR is therefore required to analyze these impacts and propose feasible mitigations.
- 6) Mitigation Measures are Inconsistent with the Napa Pipe Project – Earlier this year, I reviewed the October 2009 Draft EIR and the Traffic Study for the Napa Pipe Project, a proposed development a short distance to the North of the Napa 34 Holdings Commerce Center. Three common intersections were independently evaluated in the separate traffic studies for these two projects. All three intersections are forecast to be significantly impacted by the Napa Pipe Project for "Existing plus Project" conditions. The Draft EIR proposes

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near-term mitigation for the Napa Pipe Project which is inconsistent with proposed near-term mitigation for the Napa 34 Holdings Commerce Center Project as follows:

- a) Soscol Ferry Road/Devlin Road – The Napa Pipe Draft EIR requires that this intersection be channelized so vehicle movements do not conflict and recommends against the installation of traffic signals. This proposed mitigation conflicts with Mitigation Measure #13 for Napa 34 Holdings Commerce Center which proposes a “fair share” of the cost of traffic signals. An EIR is therefore required to resolve these inconsistencies, analyze the impacts, and propose feasible mitigation.
- b) Soscol Ferry Road/SR12/SR29/SR221 – The Napa Pipe Draft EIR identifies construction of a flyover for southbound traffic on SR221 continuing south on SR12/SR29 (a bridge over the intersection to remove this high peak hour left turn volume from the intersection). The Draft EIR requires Napa Pipe to contribute their “fair share” of these extensive improvements as mitigation.

According to Table 5 on Page 13 of the Traffic Study, Napa 34 Holdings Commerce Center increases delay by 6 seconds in the AM peak hour (already operating at LOS E) and adds traffic in the PM peak hour (already operating at LOS F). This should have been identified as a significant project traffic impact. In addition, Page 17 of the Traffic Study also states that the Project will contribute to vehicle queuing problems at the Soscol Ferry Road/SR12/SR29/SR221 intersection.

The Project should be required to pay a “fair share” to mitigate its significant traffic impacts and its queuing impacts at the Soscol Ferry Road/SR12/SR29/SR221 intersection. The CEQA document does not include mitigation measures to reduce these impacts to a level of insignificance. An EIR is therefore required to analyze these impacts and propose feasible mitigations.

- c) Airport Boulevard/SR12/SR29 – The Napa Pipe Draft EIR identifies construction of a grade-separated interchange at this intersection as proposed in the Napa County General Plan. The Draft EIR requires Napa Pipe to contribute their “fair share” of these extensive improvements as mitigation.

As previously discussed in this letter, there is at least a “fair argument” that the baseline adjustments plus Project traffic will result in LOS E conditions (an increase of only 1.5 seconds of delay) at Airport Boulevard/SR29/SR12. Resulting delay of 55.1 seconds or more will change the AM peak hour intersection operation from LOS D to LOS E,

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creating a significant project traffic impact that requires mitigation (see Significance Criteria on Page 8 of the Traffic Study). Page 19 of the Traffic Study also states that the Project will contribute to vehicle queuing problems at the Airport Boulevard/SR29/SR12 intersection. Mitigation at this intersection will also require approval and concurrence from Caltrans.

The Project should be required to pay a "fair share" to mitigate its significant traffic impacts and its queuing impacts at the Airport Boulevard/SR29/SR12 intersection. The CEQA document does not include mitigation measures to reduce these impacts to a level of insignificance. An EIR is therefore required to analyze these impacts and propose feasible mitigations.

As indicated, my review disclosed several traffic issues and concerns associated with the Napa 34 Holdings Commerce Center. The items outlined above must be carefully studied before reaching the conclusion the Project has traffic impacts that are either insignificant or can be reduced to insignificance through mitigation. The Project will clearly have additional near-term and cumulative significant traffic impacts that should be studied through an EIR process. An EIR should be prepared and circulated for public comment to propose feasible and effective mitigation measures. If you have questions regarding these comments, please call me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard

Tom Brohard, PE
Principal

Enclosure



Tom Brohard, PE

- Licenses:** 1975 / Professional Engineer / California – Civil, No. 24577
1977 / Professional Engineer / California – Traffic, No. 724
2006 / Professional Engineer / Hawaii – Civil, No. 12321
- Education:** 1969 / BSE / Civil Engineering / Duke University
- Experience:** 40 Years
- Memberships:** 1977 / Institute of Transportation Engineers – Fellow, Life
1978 / Orange County Traffic Engineers Council - Chair 1982-1983
1981 / American Public Works Association - Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. Since May 2005, he has served as Consulting City Traffic Engineer three days a week to the City of Indio. He also currently provides "on call" Traffic and Transportation Engineer services to the Cities of Big Bear Lake and San Fernando. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

- o Bellflower..... 1997 - 1998
- o Bell Gardens..... 1982 - 1995
- o Huntington Beach 1998 - 2004
- o Lawndale 1973 - 1978
- o Los Alamitos..... 1981 - 1982
- o Oceanside 1981 - 1982
- o Paramount..... 1982 - 1988
- o Rancho Palos Verdes..... 1973 - 1978
- o Rolling Hills..... 1973 - 1978, 1985 - 1993
- o Rolling Hills Estates..... 1973 - 1978, 1984 - 1991
- o San Marcos 1981
- o Santa Ana..... 1978 - 1981
- o Westlake Village..... 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over \$5 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

Tom Brohard and Associates

In his service to the City of Indio since May 2005, Tom has accomplished the following:

- ❖ Oversaw preparation and adoption of the Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain constraints
- ❖ Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street over I-10 as well as justifications for protected-permissive left turn phasing at I-10 on-ramps, the first such installation in Caltrans District 8 in Riverside County; oversaw preparation of plans and provided assistance during construction of a \$1.5 million project to install traffic signals and widen three of four ramps at the I-10/Jackson Street Interchange under a Caltrans encroachment permit issued under the Streamlined Permit Process
- ❖ Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Monroe Street over I-10 as well as striping plans to install left turn lanes on Monroe Street at the I-10 Interchange under a Caltrans encroachment permit
- ❖ Oversaw preparation of traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvement of the I-10/Monroe Street and the I-10/Golf Center Parkway Interchanges
- ❖ Oversaw preparation of plans, specifications, and contract documents and provided assistance during construction of 22 new traffic signal installations
- ❖ Oversaw preparation of plans and provided assistance during construction for the conversion of two traffic signals from fully protected left turn phasing to protected-permissive left turn phasing with flashing yellow arrows
- ❖ Reviewed and approved over 450 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects
- ❖ Oversaw preparation of a City wide traffic safety study of conditions at all schools
- ❖ Prepared over 350 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping
- ❖ Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 125 street segments
- ❖ Reviewed and approved traffic impact studies prepared for more than 16 major development projects

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.

Tom Brohard and Associates

EXHIBIT B

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April 20, 2010

Richard Drury
Lozeau | Drury LLP
1516 Oak Street, Suite 216
Alameda, CA 94501

Subject: Comments on the Proposed Napa 34 Holdings Project, Napa County, California

Dear Mr. Drury:

Soil/Water/Air Protection Enterprise (SWAPE) has reviewed the March 17, 2010 Mitigated Negative Declaration for the proposed Napa 34 Holdings project in Napa, California and supporting documentation. The project involves the construction and operation of 490,500 square feet of warehouses and offices in eight buildings on a currently undeveloped 33.9 acre parcel of land located at the intersection of State Route 29 and Airport Boulevard in Napa, California.

SWAPE conducted an analysis of the project impacts in the areas of stormwater, air emissions (both during project construction and operation), odor impacts, and greenhouse gas emissions. We have concluded that there is a fair argument that the project will result in significant impacts to the community and that an EIR should be prepared to identify and mitigate the impacts, where necessary.

Stormwater Analysis

The MND states, on p. 24, that less than significant impacts would be associated with the following issues (VII, Hydrology and Water Quality Impacts):

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

However, a July 15, 2009 letter from the applicant's consultant to Napa County, states that post-development flow will exceed pre-development volumes.¹ The 2010 Stormwater Management Plan also states that post-development flow will exceed pre-development volumes.² The MND makes no mention that post-development stormwater runoff will exceed predevelopment flows.

A waiver request for exceeding the predevelopment flows was the subject of the July 15, 2009 letter. No documentation on the disposition of the waiver request was available in the records reviewed for the preparation of this letter. However, the 2010 Stormwater Management Plan did not include any mention that a waiver was obtained from the County, so we have assumed that a waiver was not granted.

In contrast to the findings in the MND, as cited above, an exceedence of pre-development stormwater runoff should be considered as a significant unmitigated impact. Therefore, a DEIR should be prepared to include a thorough evaluation of all practicable measures to reduce stormwater runoff from the project site. If, after this evaluation, the runoff is still predicted to exceed pre-development volumes, a quantitative evaluation of all feasible BMPs should be conducted to conform to Napa County Post-Construction Runoff Management requirements.

Additionally, because groundwater is approximately 10 feet below ground surface, the evaluation of BMPs included in a DEIR should consider protection of the underlying beneficial uses of the groundwater. Any BMPs that would discharge stormwater to the subsurface in a "bioretention strip" (as proposed in the 2010 Stormwater Management Plan, p. 9) cannot cause or contribute to an exceedence of applicable groundwater quality objectives as established in the RWQCB "Basin Plan" for the Napa area.

Air Quality Analysis

The air quality analysis used as a basis for the MND is deficient. The analysis fails to: (1) adequately screen the project impacts; (2) incorporate the latest regulatory guidance; (3) provide adequate documentation of modeling assumptions; (4) recognize the significance of emissions of particulate matter; (5) analyze potential health risks from diesel particulate matter emissions during project construction; (6) identify feasible mitigation and; (7) identify cumulative impacts. Therefore, a DEIR should be prepared to include a thorough evaluation of all air quality issues associated with the project.

Screening level analysis using BAAQMD shows that the project will have significant air quality impacts

¹ Letter from TLA Engineering and Planning, to Erich Kroll, Napa County Department of Public Works, July 15, 2009

² Napa Commerce Center Stormwater Management Plan, March 2010

Screening criteria identified in the 1999 and 2009 CEQA Guidelines from BAAQMD, were developed in order to provide lead agencies and project applicants with a conservative indication of whether proposed project could result in potentially significant air quality impacts³. In the 1999 Guidelines, BAAQMD provides a list of projects that are likely to produce potentially significant emissions of NO_x based upon the size of the project, including Office Parks.

Projects With Potentially Significant Emissions⁴

| Land Use Category | Trip Generation Rate | Size of Project Likely to Generate 80 lb/day NO_x |
|--------------------------|-----------------------------|--|
| Office | | |
| General Office | 10.9/1,000 sq. ft. | 280,000 sq. ft. |
| Government Office | 68.9/1,000 sq. ft. | 55,000 sq. ft. |
| Office Park | 12.8/1,000 sq. ft. | 210,000 sq. ft. |
| Medical Office | 37.1/1,000 sq. ft. | 110,000 sq. ft. |

The 2009 Guidelines include operational and construction related screening sizes for criteria pollutant and greenhouse gas emissions from typical projects including office parks and warehouses.

Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes⁵

| Land Use Type | Operational Criteria Pollutant Screening Size | Operational GHG Screening Size | Construction-Related Screening Size |
|----------------------|--|---------------------------------------|--|
| Office Park | 323,000 sq. ft (NO _x) | 50,000 sq. ft | 277,000 sq. ft (ROG) |
| Warehouse | 864,000 sq. ft (NO _x) | 64,000 sq. ft | 259,000 sq. ft (NO _x) |

³ Bay Area Air Quality Management District, CEQA Guidelines December 2009, p. 3-1

⁴ BAAQMD. 1999. BAAQMD CEQA Guidelines. December, 1999. pg 25.

⁵ BAAQMD. 2009. CEQA Guidelines. Table 3-1. December 2009, p. 3-2

Based on the 1999 BAAQMD guidance, the proposed Napa 34 project, estimated to be approximately 459,000 square feet of warehouse and office space, is twice as large as the "Office Park" project listed having significant air quality impacts. Based on the 2009 BAAQMD guidance, the Napa 34 project will have significant NOx and GHG issues during construction and operation when compared to comparable projects that would include office parks and warehouses. When a project exceeds an applicable CEQA significance threshold, such as the BAAQMD screening thresholds, there is a fair argument that the project may have significant environmental impacts and an EIR is required. Since the Napa 34 Project exceeds the BAAQMD CEQA screening thresholds, there is a fair argument that the Project will have significant NOx and GHG impacts and an EIR is required to analyze and mitigate these impacts.

The MND failed to incorporate an analysis of this guidance. A DEIR should be prepared to include a comparison of the project to the guidance and to conduct an appropriate analysis of project impacts and identify mitigation, where warranted.

Model Results Prepared by SWAPE Show Significant impacts from Project Construction

The project applicant did not model air emission from the project during the three year construction period. For the preparation of these comments, SWAPE modeled the project using Urbemis 2007 version 9.2.4 and the project description found in the MND. Assuming that the project was to be initiated in November, 2010 and using the default assumptions provided in the model (including the Napa County project location), the emission rates generated in the model are significantly higher than the proponent provided to Napa County. The attached outputs from the model (**Attachment A and B**) show that the ROG and NOx emissions during construction would exceed the BAAQMD thresholds of significance. For the ROG, emissions during the second year of construction exceed the threshold value by nearly 10 times during the summer months of construction (507.3 lbs/day versus 54 lbs/day). For NOx the daily emission value during the second year of construction is nearly double the 54 lbs/day threshold (92 lbs NOx/day).

SWAPE Urbemis Emission Estimates During Construction Phase of Napa 34 Project

| | | 1999 BAAQMD Guidance | 2009 BAAQMD Guidance |
|-------------------------------|----------------------------------|---|---|
| Criteria Air Pollutant | SWAPE Model (lbs/day) | Construction Related Average Daily Emissions (lbs/day) | Construction Related Average Daily Emissions (lbs/day) |
| ROG | 507.3 | -- | 54 |

| | | 1999 BAAQMD Guidance | 2009 BAAQMD Guidance |
|---------------------------------------|--------------------------------------|---|---|
| Criteria Air Pollutant | SWAPE Model (lbs/day) | Construction Related Average Daily Emissions (lbs/day) | Construction Related Average Daily Emissions (lbs/day) |
| NO_x | 92 | -- | 54 |
| PM₁₀ | 113 | 80 (operation) | Best Management Practice |
| PM₁₀ (exhaust) | 5 | -- | 82 |
| PM_{2.5} (exhaust) | 3 | -- | 54 |

There is a fair argument that the project will have significant adverse impacts on air quality during the construction phase of the project and that an EIR is required. Based upon the results above, it is clear that the MND is deficient regarding the impacts of construction on air quality in the area. The proponent must prepare an EIR to include model outputs for emissions during project. Due to the large quantity of particulate matter that is generated during grading operations during the construction phase of the project, the proponent should include a Gaussian dispersion model analysis, using AERMOD, to determine whether the construction phase would increase local PM concentrations above air quality standards. Both the Urbemis analysis and the Gaussian dispersion analysis should be included in the DEIR.

Furthermore, given the three-year duration of the construction phase, it is improper to consider this to be a temporary impact. In the absence of any construction phase significance threshold for PM-10, it is appropriate to use the operational phase significance threshold of 80 ppd of PM-10 due to the long duration of the construction phase. The Project's PM-10 emissions of 113 ppd exceed the BAAQMD operational significance threshold of 80 ppd. There is therefore a fair argument that the Project will have significant PM-10 emissions that should be analyzed and mitigated in an EIR.

As a second approach, the MND should have compared construction emissions to significance thresholds established by other air districts that apply specifically to construction emissions. The table below clearly demonstrates that the Project's construction emissions, even after mitigation, far exceed significance thresholds adopted by other air districts.

Construction Phase CEQA Significance Thresholds

| Air District | Emissions Significance Thresholds (ton/year) | | | | |
|-----------------------|--|-------------|----|-------------|-------------|
| | ROG | NOx | CO | PM10 | PM2.5 |
| BAAQMD construction | 10 (54 ppd) | 10 (54 ppd) | - | 15 (80 ppd) | 10 (54 ppd) |
| SMAQMD construction | - | 11 | - | - | - |
| SCAQMD construction | 10 | 13 | 73 | 20 | 7 |
| SLOCAPCD construction | 24 | 10 | - | 7 | - |
| AVAQMD construction | 18 | 18 | 72 | 11 | - |
| SJVAPCD construction | 7 | 7 | - | - | - |
| MBUAPCD construction | - | - | - | 11 | - |
| Napa 34 Project | 507 ppd | 91 ppd | | 113 ppd | |

The construction emissions contained in the URBEMIS modeling runs exceed most construction emission significance thresholds. The Napa 34 Project therefore has significant construction air emissions that must be disclosed and analyzed in an EIR.

The MND fails to recognize the significance of emissions of particulate matter from the proposed facility

According to the BAAQMD, particulate matter causes adverse impacts in terms of public health, visibility, atmospheric deposition, aesthetic damage, and may also contribute to climate change. Health effects can result from both short-term and long-term exposure to PM pollution. Exposure to particulate pollution is linked to increased frequency and severity of asthma attacks and even premature death in people with pre-existing cardiac or respiratory disease. Those most sensitive to particulate pollution include infants and children, the elderly, and persons with heart and lung disease. Many scientific studies have linked short-term exposure to PM to a series of significant health problems, including:

- aggravated asthma
- increases in respiratory symptoms like coughing and difficult or painful breathing
- chronic bronchitis
- decreased lung function
- heart attack
- premature death

The Bay Area Air Quality Management District, which includes Napa County, is currently in nonattainment for particulate matter (both PM₁₀ and PM_{2.5}). The addition of any significant quantity of particulate matter into the air shed will only aggravate the existing air pollution problem in the District. An EIR should be prepared to address and mitigate the addition of particulate matter from the project.

The MND fails to analyze potential health risks from diesel particulate matter emissions during project construction

During construction, a large number of diesel-powered equipment would operate on site and numerous diesel-powered trucks would deliver supplies. The MND does not address the potential health risks associated with exhaust emissions of diesel particulate matter from these sources.

Diesel exhaust contains nearly 40 toxic substances and may pose a serious public health risk for residents in the vicinity of the facility. Diesel exhaust has been linked to a range of serious health problems including an increase in respiratory disease, lung damage, cancer, and premature death. Fine diesel particles are deposited deep in the lungs in the smallest airways and can result in increased respiratory symptoms and disease; decreased lung function, particularly in children and individuals with asthma; alterations in lung tissue and respiratory tract defense mechanisms; and premature death.⁶ Exposure to diesel exhaust increases the risk of lung cancer. It also causes non-cancer effects including chronic bronchitis, inflammation of lung tissue, thickening of the alveolar walls, immunological allergic reactions, and airway constriction.⁷

As early as 1988, the National Institute for Occupational Safety and Health identified diesel exhaust as a potential occupational carcinogen. In 1998, the California Air Resources Board ("CARB") formally identified the particulate fraction of diesel exhaust as a toxic air contaminant and concluded that exposure to diesel exhaust particulate matter causes cancer and acute respiratory effects.⁸ The U.S. EPA followed suit in 2002 and concluded that "long-term (*i.e.*, chronic) inhalation exposure is likely to pose lung cancer hazard to humans, as well as damage the lung in other ways depending on exposure. Short-term (*i.e.*, acute) exposures can cause irritation and inflammatory symptoms of a transient nature... The assessment also indicates that evidence for exacerbation of existing allergies and asthma symptoms is emerging."⁹ Diesel exhaust is estimated to contribute to more than 75% of the added cancer risk from air toxics in the United States.¹⁰

⁶ California Air Resources Board (CARB), Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998.

⁷ Findings of the Scientific Review Panel on The Report on Diesel Exhaust as adopted at the Panel's April 22, 1998 Meeting

⁸ California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998

⁹ U.S. EPA, Health Assessment Document for Diesel Engine Exhaust, Report EPA/600/8-90/057F, May 2002

¹⁰ Environmental Defense Fund, Cleaner Diesel Handbook, Bring Cleaner Fuel and Diesel Retrofits into Your Neighborhood, April 2005;
http://www.edf.org/documents/4941_cleanerdieselhandbook.pdf

Lagging emission standards and very old equipment in fleets have made construction equipment one of the largest sources of toxic diesel exhaust particulate pollution in California. An estimated 70% of California's construction equipment is currently not covered by federal and state regulations because it is too old.¹¹ The Project would be built out over a period of three years, concurrently with many other developments in the region. Heavy-duty diesel-powered construction equipment exhaust would release considerable amounts of diesel particulate matter, which is 89% PM2.5. Clouds of soot emitted by heavy-duty construction equipment can travel downwind for miles, then drift into heavily populated areas.

According to the BAAQMD Guidance (page 8-8), the proponent must include in its analysis of the construction impacts:

- The types of off-site receptors and their proximity to construction activity within approximately 1,000 feet.
- The duration of the construction
- The quantity and types of diesel-powered equipment
- The number of hours equipment would be operated each day
- The location(s) of equipment used, distance to nearest off-site sensitive receptors, and orientation with respect to predominant wind direction
- Location of equipment staging areas; and
- The amount of on-site diesel-generated PM2.5 exhaust if mass emission levels from construction activity are estimated.

There is a fair argument that the project will have significant adverse impacts on air quality from diesel particulate matter and the proponent must quantify the concentration of diesel particulate matter in a health risk assessment. A DEIR should be prepared to include a health risk assessment on the basis of construction impacts estimated in accordance with BAAQMD guidance.

Feasible construction mitigation measures exist and should be required for the project

Construction emissions, as modeled by SWAPE in the preparation of these comments, shows significant exceedences of BAAQMD thresholds, including ROG and NOX. Therefore, an EIR need to be prepared to consider and integrate mitigation where warranted. Mitigation measures to consider, as identified by BAAQMD, in the EIR in the reduction of toxic air contaminants include¹²:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

¹¹ Los Angeles Times, Dire Health Effects of Pollution Reported, Diesel Soot from Construction Equipment Is Blamed for Illnesses and Premature Deaths, December 6, 2006

¹² Bay Area Air Quality Management District, CEQA Guidelines December 2009, p. 2-6

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.

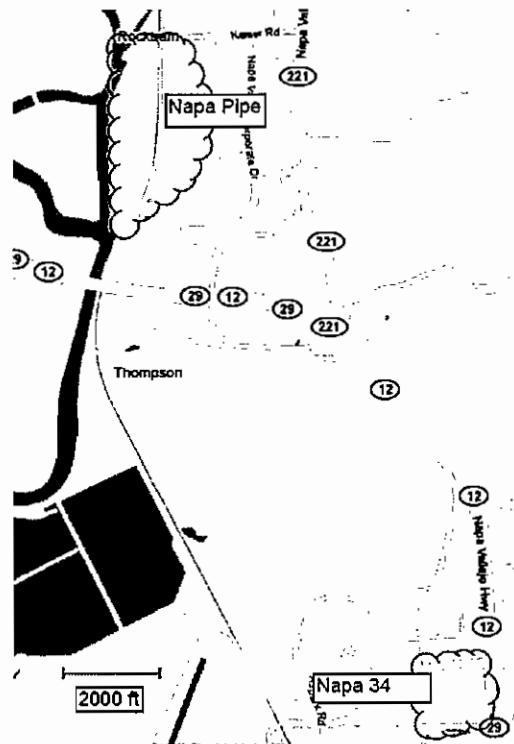
The MND fails to adequately address cumulative impacts on air quality

The MND asserts with no analysis whatsoever that the Project's emissions of criteria pollutants not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in no-attainment under an applicable federal or state ambient air quality standard. A proper cumulative impact analysis is vital for an environmental analysis because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that the environmental damage often occurs incrementally from a variety of small sources with which they interact."¹³ The MND's conclusion is flawed for the following reasons.

First, the discussion in the comments above indicates that the Project would contribute to an existing significant impact, i.e. degraded air quality in the San Francisco Bay Area air basin as evidenced by frequent violations of PM10, PM2.5 and ozone ambient air quality standards. The Project would increase the emissions of PM10, PM2.5, and ozone precursors and thus would contribute to these existing exceedances of ambient air quality standards. Thus, the Project's contribution is *per se* cumulatively significant.

¹³ Bakersfield Citizens (2004) 124 Cal. App. 4th at 1214 (quoting *Communities for a Better Environment v. California Resources Agency* 103 Cal.App.4th at 116).

Second, a cumulative impacts analysis must consider past projects, the effects of other current projects, and the effects of probable future projects.”¹⁴ The DEIR did not identify any other closely related, past, present, or reasonably foreseeable probable future projects let alone attempt to quantify their emissions and, thus, to evaluate them cumulatively with the Project. The County is also considering another large project, the Napa Pipe Project, in the vicinity of the Napa 34 Project. The proposed Napa Pipe Project would include the construction of 2,580 residential units, a 150-unit senior living facility, 50,000 square feet of office space, and approximately 40,000 square feet of retail and restaurants. Additionally, 140,000 square feet of R&D/light industrial/warehousing would be constructed along with a condominium hotel.



The County has already determined that the Napa Pipe Project will have significant air quality and other impacts requiring an EIR. The Napa 34 Project will unquestionable contribute to those same air quality impacts. Therefore the Napa 34 Project has cumulative significant air quality impacts together with the Napa Pipe Project, requiring an EIR to analyze the combined impacts. A full cumulative impact analysis must be completed to determine the real impacts on the community.

The cumulative operational impacts from Napa Pipe and Napa 34 projects are significantly higher than the BAAQMD Significance Thresholds.

¹⁴ CEQA Guidelines §15355(b)

| Proposed Project | ROG (lbs/day) | NOx (lbs/day) | PM10 (lbs/day) | PM2.5 (lbs/day) |
|-------------------------------|------------------|------------------|-------------------|--------------------|
| Napa Pipe | 262 | 115 | 157 | 33 |
| Napa 34 | 29 | 30 | 39 | 8 |
| Cumulative Impact | 291 | 145 | 196 | 41 |
| BAAQMD Significance Threshold | 54 | 54 | | |

There is a fair argument that the cumulative impacts from both the Napa Pipe and Napa 34 projects will adversely impact the area and that an EIR must be completed to address those impacts.

Greenhouse Gas Emissions – Project Level Threshold

As noted previously, the proposed Napa 34 project is of a size that will, according to the 2009 BAAQMD guidance, have significant green house gas (GHG) emitting potential. The proponent's analysis of the project's GHG emissions clearly shows that the project will exceed the recommended Bay Area Air Quality Management District's (BAAQMD's) threshold of 1,100 metric tons of CO₂ equivalent/yr.

The 1,100 MT CO₂e/yr is a numeric emissions level above which a project's contribution to global climate change is considered to be "cumulatively considerable."¹⁰ The proponent's analysis calculates the cumulative unmitigated impacts from the project to be 1,093 MT CO₂e/yr during the second year of construction (a mere seven pounds below the significance threshold) and 1,896.3 MT CO₂e/yr during the operation phase of the project (800 pounds above the significance threshold).

The proponents of the project have proposed an alternative assessment to the Bright Line value above involving an "efficiency" approach outlined in the BAAQMD's Guidance. According to BAAQMD,¹⁵ "local agencies may wish to apply this efficiency-based recommended threshold with some discretion, taking into account not only the project's efficiency, but also its total GHG emissions. Even where a project is relatively GHG-efficient as compared to other projects, in approving the project, the lead agency is committing to use what is essentially its GHG "budget" in a given way. Expending this

¹⁵ BAAQMD. 2009. Proposed Thresholds of Significance. Pg. 21.

"budget" on the proposed project may affect other development opportunities and associated obligations to mitigate or conflict with other actions that the community may wish to take to reduce its overall GHG emissions after it has conducted its programmatic analysis." Development of this project under this method would limit the size and scope of other projects in the Napa region.

Furthermore, there can be no question that the Napa 34 Project will have cumulatively significant GHG impacts when considered together with the nearby and contemporaneous Napa Pipe Project.

There is a fair argument based either on the screening approach or the more complex Urbemis model, that the project will have significant GHG emission potential. The proponent must thoroughly evaluate this potential and address the necessary mitigation measures in the EIR for the project.

Odor

The MND failed to consider the presence of the Napa Sanitation District Soscol Wastewater Treatment Plant, located at 1515 Soscol Ferry Road. The facility is located approximately 1 mile northwest of the proposed project. According to the Napa Sanitation District, the facility is a 15 million gallon per day (mgd) treatment plant that includes preliminary treatment (screening), primary treatment (clarifiers), biological secondary treatment (340 acres of oxidation ponds and/or activated sludge facilities), secondary clarification or sedimentation, sand filtration, chlorination, sludge digestion and solids de-watering facilities.

According to BAAQMD guidance¹⁶, a project is presumed to have significant odor impacts if people are to be located within one to two-miles of facilities known to generate odorous compounds. Those facilities and the screening distances are included in the table below¹⁷.

¹⁶ Bay Area Air Quality Management District, CEQA Guidelines December 2009, p. 3-4

¹⁷ Bay Area Air Quality Management District, CEQA Guidelines December 2009, Table 3-3 p. 3-4

| Facilities Known To Generate Odors | Screening Distance |
|--|---------------------------|
| Wastewater Treatment Plant | 2 miles |
| Sanitary Landfill | 2 miles |
| Transfer Station | 1 mile |
| Composting Facility | 1 mile |
| Petroleum Refinery | 2 miles |
| Asphalt Batch Plant | 2 miles |
| Chemical Manufacturing | 2 miles |
| Fiberglass Manufacturing | 1 mile |
| Painting/Coating Operations (e.g. auto body shops) | 1 mile |
| Rendering Plant | 2 mile |
| Coffee Roaster | 1 mile |

According to the BAAQMD CEQA Guidelines:

Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact [emphasis added]. Odor impacts on residential areas and other sensitive receptors warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites and commercial areas. Analysis of potential odor impacts should be conducted for both of the following situations: 1) sources of odorous emissions locating near existing receptors, and 2) receptors locating near existing odor sources.¹⁸

Determining the significance of potential odor impacts involves a two-step process. First, determine whether the project would result in an odor source and receptors being located within the distances indicated in Table 4. Table 4 lists types of facilities known to emit objectionable odors. The Lead Agency should evaluate facilities not included in Table 4 or projects separated by greater distances than indicated in Table 4 if warranted by local conditions or special circumstances. Second, if the proposed project would result in an odor source and receptors being located closer than the screening level distances indicated in Table 4, a more detailed analysis, as described in Chapter 3, should be conducted.

¹⁸ Bay Area Air Quality Management District, CEQA Guidelines December 2009, p. 7-2

Since the Project may result in exposing members of the public to objectionable odors, namely the District Soscol Wastewater Treatment Plant, an EIR is required to analyze this impact and to propose feasible alternatives and mitigation.

In addition to violating the BAAQMD's CEQA Guidance regarding odor, the proponents have failed to consider the negative impacts from the odorous compounds. The MND does not provide any significant analysis of potential odor problems

Unpleasant odors can also impair mood leading to increased levels of tension, depression, anger, fatigue and confusion. Conditioned aversions may play a role in perceptions and health symptoms induced by malodors. If a malodor has been previously associated with health symptoms, the odor alone may subsequently recreate these symptoms in the absence of the allergy.¹⁹ Ambient odors can provoke a wide distribution of reactions. Variations are most often attributed to differences in individual sensitivity. Behavioral responses for a single individual and among individuals exposed to the same odor over time can be greatly varied. Cognitive processes may be modifying the over perception of odor exposure. Some individuals may exhibit extreme sensitivity and adaptation to environmental odors does not occur.²⁰

In 2008, a study on residents living near industrial hog operations found that odors from the facilities restricted residents' activities to an extent that may affect health. Odors were found to restrict social activities, outdoor activities, and effect sleeping patterns. Research has shown that residents in rural communities perceive environmental barriers as reasons for inactivity and inactivity can have a major impact on a person's physical health.²¹ Another study found that malodor reported in communities near swine operations originated from the operations. The study found that odor ratings were related to temperature, PM₁₀, semi volatile PM₁₀ and hydrogen sulfide concentration. The odds of reporting a change in daily activities due to odor increased 62% for each unit increase in average odor during a 12 hour period. Odor was related to levels of stress reported in daily diaries. Anticipation of irregular odor events may also cause stress and anxiety about daily activities and social events.²²

¹⁹ Schiffman, S.S., Miller, E.A.S., Suggs, M.S. and Graham, B.G. (1995). The effect of environmental odors emanating from commercial swine operations on the mood of nearby residents. *Brain Res. Bull.*, 37, 369-375

²⁰ Dalton, P. (1996). Odor perception and beliefs about risk. *Chem. Senses* 21: 447-458

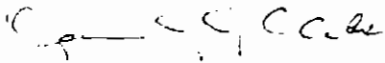
²¹ Tajik M, Muhammad N, Lowman A, Thu K, Wing S, and Grant G. (2008). Impact of odor from industrial hog operations on daily living activities. *New Solutions* 18(2): 193-205

²² Wing S, Horton R, Marshall S, Thu K, Tajik M, Schinasi L, and Schiffman S. (2008). Air pollution and odor in communities near industrial swine operations. *Environmental Health Perspectives*

Conclusion

There is substantial evidence that the Project would result in significant adverse impacts that were not identified in the MND and that are not adequately mitigated. Many of the MND's conclusions that environmental impacts are not significant or less than significant with mitigation are unsupported or contradicted by the analysis we have conducted in the preparation of these comments. As a result, several analyses presented in the MND, including impacts on air quality and odor fail to identify or disclose the magnitude of significant adverse impacts. The CEQA Guidelines require that an EIR be prepared if there is substantial evidence that any aspect of a project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial²³. Therefore the City should require the preparation of an EIR for the Project.

Sincerely,



James Clark, Ph.D.



Matt Hagemann, P.G.

²³ CEQA Guidelines, 15063(b)(1).

Attachment A: Summer Emission Estimates

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\James Clark\Application Data\Urbemis\Version9a\Projects\Napa34.urb924

Project Name: Napa 34 Commerical Center

Project Location: Napa County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|------------|
| 2010 TOTALS (lbs/day unmitigated) | 8.39 | 52.97 | 31.37 | 0.01 | 112.64 | 3.24 | 115.87 | 23.53 | 2.98 | 26.50 | 5,080.69 |
| 2010 TOTALS (lbs/day mitigated) | 8.39 | 52.97 | 31.37 | 0.01 | 112.64 | 3.24 | 115.87 | 23.53 | 2.98 | 26.50 | 5,080.69 |
| 2011 TOTALS (lbs/day unmitigated) | 507.30 | 91.97 | 106.18 | 0.09 | 113.01 | 5.18 | 118.20 | 23.66 | 4.75 | 28.41 | 15,703.19 |
| 2011 TOTALS (lbs/day mitigated) | 507.30 | 91.97 | 106.18 | 0.09 | 113.01 | 5.18 | 118.20 | 23.66 | 4.75 | 28.41 | 15,703.19 |

AREA SOURCE EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 3.24 | 1.74 | 4.52 | 0.00 | 0.01 | 0.01 | 2,048.06 |
| TOTALS (lbs/day, mitigated) | 3.24 | 1.74 | 4.52 | 0.00 | 0.01 | 0.01 | 2,048.06 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | NaN | 0.00 | 0.00 | 0.00 |

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OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 26.05 | 24.39 | 264.31 | 0.21 | 39.06 | 7.48 | 22,146.21 |
| TOTALS (lbs/day, mitigated) | 26.05 | 24.39 | 264.31 | 0.21 | 39.06 | 7.48 | 22,146.21 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 29.29 | 26.13 | 268.83 | 0.21 | 39.07 | 7.49 | 24,194.27 |
| TOTALS (lbs/day, mitigated) | 29.29 | 26.13 | 268.83 | 0.21 | 39.07 | 7.49 | 24,194.27 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|---|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|------------|
| Time Slice 11/30/2010-12/27/2010 Active Days: 20 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading 11/30/2010- 01/11/2011 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 |

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|--|------|-------|-------|------|--------|------|--------|-------|------|-------|----------|
| Time Slice 12/28/2010-12/31/2010 Active Days: 4 | 8.39 | 52.97 | 31.37 | 0.01 | 112.64 | 3.24 | 115.87 | 23.53 | 2.98 | 26.50 | 5,080.69 |
| Asphalt 12/28/2010-01/11/2011 | 4.17 | 19.21 | 12.24 | 0.01 | 0.03 | 1.44 | 1.47 | 0.01 | 1.32 | 1.33 | 1,946.12 |
| Paving Off-Gas | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.48 | 14.87 | 8.27 | 0.00 | 0.00 | 1.28 | 1.28 | 0.00 | 1.18 | 1.18 | 1,131.92 |
| Paving On Road Diesel | 0.26 | 4.19 | 1.33 | 0.01 | 0.02 | 0.15 | 0.17 | 0.01 | 0.14 | 0.15 | 610.86 |
| Paving Worker Trips | 0.09 | 0.15 | 2.64 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.35 |
| Fine Grading 11/30/2010-01/11/2011 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 |
| Time Slice 1/3/2011-1/10/2011 Active Days: 6 | 7.96 | 49.72 | 30.17 | 0.01 | 112.64 | 3.06 | 115.70 | 23.53 | 2.82 | 26.34 | 5,080.89 |
| Asphalt 12/28/2010-01/11/2011 | 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 |
| Paving Off-Gas | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 |
| Paving On Road Diesel | 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 |
| Paving Worker Trips | 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 |
| Fine Grading 11/30/2010-01/11/2011 | 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 |

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| | | | | | | | | | | | |
|---|-------|-------|--------|------|--------|------|--------|-------|------|-------|-----------|
| Time Slice 1/11/2011-1/11/2011 Active Days: 1 | 14.68 | 91.97 | 106.18 | 0.09 | 113.01 | 5.18 | 118.20 | 23.66 | 4.75 | 28.41 | 15,703.19 |
| Asphalt 12/28/2010-01/11/2011 | 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 |
| Paving Off-Gas | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 |
| Paving On Road Diesel | 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 |
| Paving Worker Trips | 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 |
| Building 01/11/2011-08/22/2011 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Building Worker Trips | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |
| Fine Grading 11/30/2010-01/11/2011 | 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 |
| Time Slice 1/12/2011-8/5/2011 Active Days: 148 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building 01/11/2011-08/22/2011 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Building Worker Trips | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |

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Time Slice 8/8/2011-8/22/2011

Active Days: 11

Building 01/11/2011-08/22/2011

Building Off Road Diesel

Building Vendor Trips

Building Worker Trips

Coating 08/08/2011-09/05/2011

Architectural Coating

Coating Worker Trips

Time Slice 8/23/2011-9/5/2011

Active Days: 10

Coating 08/08/2011-09/05/2011

Architectural Coating

Coating Worker Trips

Phase Assumptions

Phase: Fine Grading 11/30/2010 - 1/11/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 22.53

Maximum Daily Acreage Disturbed: 5.63

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

| | | | | | | | | | | |
|--------|-------|-------|------|------|------|------|------|------|------|-----------|
| 507.30 | 42.64 | 83.14 | 0.09 | 0.41 | 2.14 | 2.54 | 0.14 | 1.95 | 2.09 | 11,216.35 |
| 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |
| 500.58 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |
| 500.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.23 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |
| 500.58 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |
| 500.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.23 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |

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Phase: Paving 12/28/2010 - 1/11/2011 - Default Paving Description

Acres to be Paved: 5.63

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 1/11/2011 - 8/22/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 8/8/2011 - 9/5/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

| CO ₂ | PM ₁₀ | PM _{2.5} | PM _{2.5} Exhaust | PM ₁₀ Exhaust | SO ₂ | CO | NO _x | ROG |
|-----------------|------------------|-------------------|---------------------------|--------------------------|-----------------|----|-----------------|-----|
|-----------------|------------------|-------------------|---------------------------|--------------------------|-----------------|----|-----------------|-----|

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| | | | | | | | | | | | |
|---|-------------|--------------|--------------|-------------|---------------|-------------|---------------|--------------|-------------|--------------|-----------------|
| Time Slice 11/30/2010-12/27/2010 Active Days: 20 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading 11/30/2010- 01/11/2011 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 |
| Time Slice 12/28/2010-12/31/2010 Active Days: 4 | <u>8.39</u> | <u>52.97</u> | <u>31.37</u> | <u>0.01</u> | <u>112.64</u> | <u>3.24</u> | <u>115.87</u> | <u>23.53</u> | <u>2.98</u> | <u>26.50</u> | <u>5,080.69</u> |
| Asphalt 12/28/2010-01/11/2011 | 4.17 | 19.21 | 12.24 | 0.01 | 0.03 | 1.44 | 1.47 | 0.01 | 1.32 | 1.33 | 1,946.12 |
| Paving Off-Gas | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.48 | 14.87 | 8.27 | 0.00 | 0.00 | 1.28 | 1.28 | 0.00 | 1.18 | 1.18 | 1,131.92 |
| Paving On Road Diesel | 0.26 | 4.19 | 1.33 | 0.01 | 0.02 | 0.15 | 0.17 | 0.01 | 0.14 | 0.15 | 610.86 |
| Paving Worker Trips | 0.09 | 0.15 | 2.64 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.35 |
| Fine Grading 11/30/2010- 01/11/2011 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 |

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Time Slice 13/2011-1/10/2011

Active Days: 6

Asphalt 12/28/2010-01/11/2011

Paving Off-Gas

Paving Off Road Diesel

Paving On Road Diesel

Paving Worker Trips

Fine Grading 11/30/2010-01/11/2011

Fine Grading Dust

Fine Grading Off Road Diesel

Fine Grading On Road Diesel

Fine Grading Worker Trips

| | | | | | | | | | | |
|------|-------|-------|------|--------|------|--------|-------|------|-------|----------|
| 7.96 | 49.72 | 30.17 | 0.01 | 112.64 | 3.06 | 115.70 | 23.53 | 2.82 | 26.34 | 5,080.89 |
| 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 |
| 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 |
| 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 |
| 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 |
| 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 |
| 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 |

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| | | | | | | | | | | | |
|---|-------|-------|--------|------|--------|------|--------|-------|------|-------|-----------|
| Time Slice 1/1/2011-1/1/2011 Active Days: 1 | 14.68 | 91.97 | 106.18 | 0.09 | 113.01 | 5.18 | 118.20 | 23.66 | 4.75 | 28.41 | 15,703.19 |
| Asphalt 12/28/2010-01/11/2011 | 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 |
| Paving Off-Gas | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 |
| Paving On Road Diesel | 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 |
| Paving Worker Trips | 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 |
| Building 01/11/2011-08/22/2011 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Building Worker Trips | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |
| Fine Grading 11/30/2010-01/11/2011 | 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 |
| Time Slice 1/12/2011-8/5/2011 Active Days: 148 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building 01/11/2011-08/22/2011 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Building Worker Trips | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |

Building 01/11/2011-08/22/2011

1
2
3
4
5
6

Building Worker Trips

Learning Objectives

Coating Worker Trips

Days: 10

Billing

Coating Worker Trips

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| <u>Source</u> | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO₂</u> | <u>PM₁₀</u> | <u>PM_{2.5}</u> | <u>CO₂</u> |
|-------------------------------|------------|------------|-----------|-----------------------|------------------------|-------------------------|-----------------------|
| Natural Gas | 0.12 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |
| Hearth | | | | | | | |
| Landscape | 0.25 | 0.04 | 3.09 | 0.00 | 0.01 | 0.01 | 5.62 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 2.87 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 3.24 | 1.74 | 4.52 | 0.00 | 0.01 | 0.01 | 2,048.06 |

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Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|-----------------------------|------|------|------|------|------|-------|----------|
| Natural Gas | 0.12 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |
| Hearth | | | | | | | |
| Landscape | 0.25 | 0.04 | 3.09 | 0.00 | 0.01 | 0.01 | 5.62 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 2.87 | | | | | | |
| TOTALS (lbs/day, mitigated) | 3.24 | 1.74 | 4.52 | 0.00 | 0.01 | 0.01 | 2,048.06 |

Area Source Mitigation Measures SelectedMitigation DescriptionPercent ReductionArea Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|-------------------------------|-------|-------|--------|------|-------|------|-----------|
| Office park | 11.59 | 11.62 | 129.01 | 0.10 | 18.56 | 3.56 | 10,586.92 |
| Warehouse | 14.46 | 12.77 | 135.30 | 0.11 | 20.50 | 3.92 | 11,559.29 |
| TOTALS (lbs/day, unmitigated) | 26.05 | 24.39 | 264.31 | 0.21 | 39.06 | 7.48 | 22,146.21 |

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

| <u>Source</u> | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|-----------------------------|-------|-------|--------|------|-------|------|-----------|
| Office park | 11.59 | 11.62 | 129.01 | 0.10 | 18.56 | 3.56 | 10,586.92 |
| Warehouse | 14.46 | 12.77 | 135.30 | 0.11 | 20.50 | 3.92 | 11,559.29 |
| TOTALS (lbs/day, mitigated) | 26.05 | 24.39 | 264.31 | 0.21 | 39.06 | 7.48 | 22,146.21 |

Operational Mitigation Options SelectedResidential Mitigation MeasuresNonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 0%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was NOT selected.

Operational Settings:

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2012 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---------------|---------|-----------|------------|-----------|-------------|-----------|
| Office park | | 11.42 | 1000 sq ft | 134.50 | 1,535.99 | 10,788.97 |
| Warehouse | | 4.96 | 1000 sq ft | 356.00 | 1,765.76 | 11,918.54 |
| | | | | | 3,301.75 | 22,707.51 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|-------------------------------------|--------------|--------------|----------|--------|
| Light Auto | 45.7 | 0.9 | 98.7 | 0.4 |
| Light Truck < 3750 lbs | 17.6 | 2.3 | 92.6 | 5.1 |
| Light Truck 3751-5750 lbs | 19.9 | 1.0 | 98.5 | 0.5 |
| Med Truck 5751-8500 lbs | 7.8 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 1.6 | 0.0 | 68.8 | 31.2 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 55.6 | 44.4 |
| Med-Heavy Truck 14,001-33,000 lbs | 1.0 | 0.0 | 20.0 | 80.0 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.3 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 100.0 | 0.0 |
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 3.9 | 59.0 | 41.0 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.1 | 0.0 | 90.9 | 9.1 |

| | Residential | | | Commercial | | |
|---------------------------|-------------|-----------|------------|------------|----------|----------|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| Urban Trip Length (miles) | 10.8 | 7.3 | 7.5 | 9.5 | 7.4 | 7.4 |
| Rural Trip Length (miles) | 16.8 | 7.1 | 7.9 | 14.7 | 6.6 | 6.6 |
| Trip speeds (mph) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| % of Trips - Residential | 32.9 | 18.0 | 49.1 | | | |

| | | | |
|-------------|------|------|------|
| Office park | 48.0 | 24.0 | 28.0 |
| Warehouse | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\James Clark\Application Data\Urbemis\Version9a\Projects\napa34.urb924

Project Name: Napa 34 Commerical Center

Project Location: Napa County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|------------|
| 2010 TOTALS (lbs/day unmitigated) | 8.39 | 52.97 | 31.37 | 0.01 | 112.64 | 3.24 | 115.87 | 23.53 | 2.98 | 26.50 | 5,080.69 |
| 2010 TOTALS (lbs/day mitigated) | 8.39 | 52.97 | 31.37 | 0.01 | 112.64 | 3.24 | 115.87 | 23.53 | 2.98 | 26.50 | 5,080.69 |
| 2011 TOTALS (lbs/day unmitigated) | 507.30 | 91.97 | 106.18 | 0.09 | 113.01 | 5.18 | 118.20 | 23.66 | 4.75 | 28.41 | 15,703.19 |
| 2011 TOTALS (lbs/day mitigated) | 507.30 | 91.97 | 106.18 | 0.09 | 113.01 | 5.18 | 118.20 | 23.66 | 4.75 | 28.41 | 15,703.19 |

AREA SOURCE EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 2.99 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |
| TOTALS (lbs/day, mitigated) | 2.99 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | NaN | NaN | NaN | 0.00 |

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OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 26.18 | 36.88 | 290.25 | 0.19 | 39.06 | 7.48 | 19,242.34 |
| TOTALS (lbs/day, mitigated) | 26.18 | 36.88 | 290.25 | 0.19 | 39.06 | 7.48 | 19,242.34 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 29.17 | 38.58 | 291.68 | 0.19 | 39.06 | 7.48 | 21,284.78 |
| TOTALS (lbs/day, mitigated) | 29.17 | 38.58 | 291.68 | 0.19 | 39.06 | 7.48 | 21,284.78 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|---|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|------------|
| Time Slice 11/30/2010-12/27/2010 Active Days: 20 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading 11/30/2010- 01/11/2011 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 |

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| | | | | | | | | | | | | |
|--|------|-------|-------|------|--------|------|--------|-------|------|-------|----------|--|
| Time Slice 12/28/2010-12/31/2010 Active Days: 4 | | | | | | | | | | | | |
| Asphalt 12/28/2010-01/11/2011 | 8.39 | 52.97 | 31.37 | 0.01 | 112.64 | 3.24 | 115.87 | 23.53 | 2.98 | 26.50 | 5,080.69 | |
| Paving Off-Gas | 4.17 | 19.21 | 12.24 | 0.01 | 0.03 | 1.44 | 1.47 | 0.01 | 1.32 | 1.33 | 1,946.12 | |
| Paving Off Road Diesel | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Paving On Road Diesel | 2.48 | 14.87 | 8.27 | 0.00 | 0.00 | 1.28 | 1.28 | 0.00 | 1.18 | 1.18 | 1,131.92 | |
| Paving Worker Trips | 0.26 | 4.19 | 1.33 | 0.01 | 0.02 | 0.15 | 0.17 | 0.01 | 0.14 | 0.15 | 610.86 | |
| Fine Grading 11/30/2010-01/11/2011 | 0.09 | 0.15 | 2.64 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.35 | |
| Fine Grading Dust | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 | |
| Fine Grading Off Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 | |
| Fine Grading On Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 | |
| Fine Grading Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Time Slice 1/3/2011-1/10/2011 Active Days: 6 | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 | |
| Asphalt 12/28/2010-01/11/2011 | 7.96 | 49.72 | 30.17 | 0.01 | 112.64 | 3.06 | 115.70 | 23.53 | 2.82 | 26.34 | 5,080.89 | |
| Paving Off-Gas | 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 | |
| Paving Off Road Diesel | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Paving On Road Diesel | 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 | |
| Paving Worker Trips | 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 | |
| Fine Grading 11/30/2010-01/11/2011 | 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 | |
| Fine Grading Dust | 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 | |
| Fine Grading Off Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 | |
| Fine Grading On Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 | |
| Fine Grading Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 | |

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| | | | | | | | | | | | |
|---|-------|--------------|---------------|-------------|---------------|-------------|---------------|--------------|-------------|--------------|------------------|
| Time Slice 1/11/2011-1/11/2011 Active Days: 1 | 14.68 | <u>91.97</u> | <u>106.18</u> | <u>0.09</u> | <u>113.01</u> | <u>5.18</u> | <u>118.20</u> | <u>23.66</u> | <u>4.75</u> | <u>28.41</u> | <u>15,703.19</u> |
| Asphalt 12/28/2010-01/11/2011 | 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 |
| Paving Off-Gas | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 |
| Paving On Road Diesel | 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 |
| Paving Worker Trips | 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 |
| Building 01/11/2011-08/22/2011 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Building Worker Trips | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |
| Fine Grading 11/30/2010-01/11/2011 | 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 |
| Time Slice 1/12/2011-8/5/2011 Active Days: 148 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building 01/11/2011-08/22/2011 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Building Worker Trips | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |

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Time Slice 8/8/2011-8/22/2011
Active Days: 11

| | | | | | | | | | | | |
|--------------------------------|--------|-------|-------|------|------|------|------|------|------|------|-----------|
| Building 01/11/2011-08/22/2011 | 507.30 | 42.64 | 83.14 | 0.09 | 0.41 | 2.14 | 2.54 | 0.14 | 1.95 | 2.09 | 11,216.35 |
| Building Off Road Diesel | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Vendor Trips | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Worker Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Coating 08/08/2011-09/05/2011 | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |
| Architectural Coating | 500.58 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |
| Coating Worker Trips | 500.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Time Slice 8/23/2011-9/5/2011 | 0.23 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |
| Active Days: 10 | 500.58 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |
| Coating 08/08/2011-09/05/2011 | 500.58 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |
| Architectural Coating | 500.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 0.23 | 0.40 | 7.14 | 0.01 | 0.03 | 0.02 | 0.05 | 0.01 | 0.01 | 0.02 | 594.05 |

Phase Assumptions

Phase: Fine Grading 11/30/2010 - 1/11/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 22.53

Maximum Daily Acreage Disturbed: 5.63

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

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Phase: Paving 12/28/2010 - 1/11/2011 - Default Paving Description

Acres to be Paved: 5.63

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 1/11/2011 - 8/22/2011 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 8/8/2011 - 9/5/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

| <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM2.5</u> | <u>PM2.5 Exhaust</u> | <u>CO2</u> |
|------------|------------|-----------|------------|------------------|---------------------|--------------|----------------------|------------|
|------------|------------|-----------|------------|------------------|---------------------|--------------|----------------------|------------|

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| | | | | | | | | | | | |
|---|-------------|--------------|--------------|-------------|---------------|-------------|---------------|--------------|-------------|--------------|-----------------|
| Time Slice 11/30/2010-12/27/2010 Active Days: 20 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading 11/30/2010- 01/11/2011 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 |
| Time Slice 12/28/2010-12/31/2010 Active Days: 4 | <u>8.39</u> | <u>52.97</u> | <u>31.37</u> | <u>0.01</u> | <u>112.64</u> | <u>3.24</u> | <u>115.87</u> | <u>23.53</u> | <u>2.98</u> | <u>26.50</u> | <u>5,080.69</u> |
| Asphalt 12/28/2010-01/11/2011 | 4.17 | 19.21 | 12.24 | 0.01 | 0.03 | 1.44 | 1.47 | 0.01 | 1.32 | 1.33 | 1,946.12 |
| Paving Off-Gas | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.48 | 14.87 | 8.27 | 0.00 | 0.00 | 1.28 | 1.28 | 0.00 | 1.18 | 1.18 | 1,131.92 |
| Paving On Road Diesel | 0.26 | 4.19 | 1.33 | 0.01 | 0.02 | 0.15 | 0.17 | 0.01 | 0.14 | 0.15 | 610.86 |
| Paving Worker Trips | 0.09 | 0.15 | 2.64 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.35 |
| Fine Grading 11/30/2010- 01/11/2011 | 4.22 | 33.76 | 19.13 | 0.00 | 112.61 | 1.80 | 114.40 | 23.52 | 1.65 | 25.17 | 3,134.57 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.05 | 0.09 | 1.65 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.09 |

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Time Slice 1/3/2011-1/10/2011

Active Days: 6

Asphalt 12/28/2010-01/11/2011

Paving Off-Gas

Paving Off Road Diesel

Paving On Road Diesel

Paving Worker Trips

Fine Grading 11/30/2010-01/11/2011

Fine Grading Dust

Fine Grading Off Road Diesel

Fine Grading On Road Diesel

Fine Grading Worker Trips

| | | | | | | | | | | |
|------|-------|-------|------|--------|------|--------|-------|------|-------|----------|
| 7.96 | 49.72 | 30.17 | 0.01 | 112.64 | 3.06 | 115.70 | 23.53 | 2.82 | 26.34 | 5,080.89 |
| 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 |
| 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 |
| 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 |
| 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 |
| 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 |
| 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 |

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Time Slice 1/11/2011-1/11/2011

Active Days: 1

| | | | | | | | | | | | |
|------------------------------------|-------|-------|--------|------|--------|------|--------|-------|------|-------|-----------|
| Asphalt 12/28/2010-01/11/2011 | 14.68 | 91.97 | 106.18 | 0.09 | 113.01 | 5.18 | 118.20 | 23.66 | 4.75 | 28.41 | 15,703.19 |
| Paving Off-Gas | 4.00 | 18.03 | 11.82 | 0.01 | 0.03 | 1.37 | 1.41 | 0.01 | 1.26 | 1.27 | 1,946.24 |
| Paving Off Road Diesel | 1.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving On Road Diesel | 2.34 | 14.17 | 8.17 | 0.00 | 0.00 | 1.24 | 1.24 | 0.00 | 1.14 | 1.14 | 1,131.92 |
| Paving Worker Trips | 0.24 | 3.73 | 1.20 | 0.01 | 0.02 | 0.13 | 0.16 | 0.01 | 0.12 | 0.13 | 610.86 |
| Building 01/11/2011-08/22/2011 | 0.08 | 0.14 | 2.44 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 203.47 |
| Building Off Road Diesel | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Vendor Trips | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Worker Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Fine Grading 11/30/2010-01/11/2011 | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |
| Fine Grading Dust | 3.96 | 31.69 | 18.35 | 0.00 | 112.61 | 1.69 | 114.29 | 23.52 | 1.55 | 25.07 | 3,134.64 |
| Fine Grading Off Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 112.60 | 0.00 | 112.60 | 23.52 | 0.00 | 23.52 | 0.00 |
| Fine Grading On Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Fine Grading Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Time Slice 1/12/2011-8/5/2011 | 0.05 | 0.09 | 1.53 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.17 |
| Active Days: 148 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building 01/11/2011-08/22/2011 | 6.72 | 42.24 | 76.01 | 0.09 | 0.38 | 2.12 | 2.50 | 0.13 | 1.94 | 2.07 | 10,622.30 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 1.79 | 23.94 | 18.09 | 0.05 | 0.18 | 0.88 | 1.06 | 0.06 | 0.80 | 0.86 | 5,083.18 |
| Building Worker Trips | 1.54 | 2.63 | 47.07 | 0.04 | 0.19 | 0.11 | 0.30 | 0.07 | 0.09 | 0.16 | 3,917.93 |

Active Days: 11

Coating Worker Trips

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|-----------------------------------|------|------|------|------|------|-------|----------|
| Natural Gas | 0.12 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |
| Hearth | | | | | | | |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 2.87 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 2.99 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |

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Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

| <u>Source</u> | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| Natural Gas | 0.12 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |
| Hearth | | | | | | | |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 2.87 | | | | | | |
| TOTALS (lbs/day, mitigated) | 2.99 | 1.70 | 1.43 | 0.00 | 0.00 | 0.00 | 2,042.44 |

Area Source Mitigation Measures SelectedMitigation DescriptionPercent ReductionArea Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| <u>Source</u> | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM25</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|-------------|------------|
| Office park | 12.62 | 17.59 | 139.63 | 0.09 | 18.56 | 3.56 | 9,207.21 |
| Warehouse | 13.56 | 19.29 | 150.62 | 0.10 | 20.50 | 3.92 | 10,035.13 |
| TOTALS (lbs/day, unmitigated) | 26.18 | 36.88 | 290.25 | 0.19 | 39.06 | 7.48 | 19,242.34 |

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

| <u>Source</u> | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|-----------------------------|-------|-------|--------|------|-------|------|-----------|
| Office park | 12.62 | 17.59 | 139.63 | 0.09 | 18.56 | 3.56 | 9,207.21 |
| Warehouse | 13.56 | 19.29 | 150.62 | 0.10 | 20.50 | 3.92 | 10,035.13 |
| TOTALS (lbs/day, mitigated) | 26.18 | 36.88 | 290.25 | 0.19 | 39.06 | 7.48 | 19,242.34 |

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 0%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was NOT selected.

Operational Settings:

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2012 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---------------|---------|-----------|------------|-----------|-------------|-----------|
| Office park | | 11.42 | 1000 sq ft | 134.50 | 1,535.99 | 10,788.97 |
| Warehouse | | 4.96 | 1000 sq ft | 356.00 | 1,765.76 | 11,918.54 |
| | | | | | 3,301.75 | 22,707.51 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|-------------------------------------|--------------|--------------|----------|--------|
| Light Auto | 45.7 | 0.9 | 98.7 | 0.4 |
| Light Truck < 3750 lbs | 17.6 | 2.3 | 92.6 | 5.1 |
| Light Truck 3751-5750 lbs | 19.9 | 1.0 | 98.5 | 0.5 |
| Med Truck 5751-8500 lbs | 7.8 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 1.6 | 0.0 | 68.8 | 31.2 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 55.6 | 44.4 |
| Med-Heavy Truck 14,001-33,000 lbs | 1.0 | 0.0 | 20.0 | 80.0 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.3 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 100.0 | 0.0 |
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 3.9 | 59.0 | 41.0 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.1 | 0.0 | 90.9 | 9.1 |

| | <u>Travel Conditions</u> | | | | |
|--|--------------------------|-----------|-------------------|---------|----------|
| | <u>Residential</u> | | <u>Commercial</u> | | |
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work |
| Urban Trip Length (miles) | 10.8 | 7.3 | 7.5 | 9.5 | 7.4 |
| Rural Trip Length (miles) | 16.8 | 7.1 | 7.9 | 14.7 | 6.6 |
| Trip speeds (mph) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| % of Trips - Residential | 32.9 | 18.0 | 49.1 | | |
| | | | | | |
| % of Trips - Commercial (by land use) | | | | | |
| Office park | | | | 48.0 | 24.0 |
| Warehouse | | | | 2.0 | 1.0 |
| | | | | | 97.0 |
| <u>Operational Changes to Defaults</u> | | | | | |

James J. J. Clark, Ph.D.*Principal Toxicologist*

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

Ph.D., Environmental Health Science, University of California, 1995

M.S., Environmental Health Science, University of California, 1993

B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

Professional Experience:

Dr. Clark is the principal toxicologist, principal air modeler, lead scientist for SWAPE's benzene and fuel oxygenates research program, emerging contaminant research program (pharmaceuticals, personal care products, and industrial solvents); and managing partner at SWAPE. He has 20 years of experience in researching the effects of environmental contaminants on human health including environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); conducting and managing human health risk assessments for regulatory compliance and risk-based clean-up levels; and toxicological and medical literature research.

Significant projects performed by Dr. Clark include the following:

LITIGATION SUPPORT

Case: Raymond Saltonstall V. Fuller O'Brien, KILZ, and Zinsser, et al. United States District Court
Central District Of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in

published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Richard Boyer and Elizabeth Boyer, husband and wife, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-7G.

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: : Settlement in favor of plaintiff.

Case: JoAnne R. Cook, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-9R

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of an individual exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: : Settlement in favor of plaintiff.

Case: Patrick Allen And Susan Allen, husband and wife, and Andrew Allen, a minor, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-W

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated

against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: : Settlement in favor of plaintiff.

Case: Michael Fahey, Susan Fahey V. Atlantic Richfield Company, et al. United States District Court Central District Of California Civil Action Number CV-06 7109 JCL.

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Tanya Drummond V. E.I. Dupont De Nemours and Company, Meadowbrook Corporation, Mattheissen & Hegler Zinc Company Inc, Nuzum Trucking Company, T.L. Diamond & Company, Inc., and Joseph Paushe, Circuit Court of Harrison County, West Virginia. Civil Action Number 04-C-296-2.

Client: Cochran, Cherry, Givens, Smith, Lane & Taylor, P.C., Dothan, Alabama

Dr. Clark performed a comprehensive exposure assessment of a plaintiff exposed to toxic metals from a former zinc smelting facility. The site has undergone a CERCLA mandated removal action/remediation for the presence of the toxic metals. Intensive modeling results (from physical and numerical models) were used to determine a daily dose of metals in the plaintiff over a life time of exposure along with a causal analysis to determine the contribution of the toxic metals to the renal carcinomas the plaintiff died from.

Case Result: Settlement in favor of plaintiff.

Case: City of Stockton v. BNSF Railway Co., et al. Eastern District of California, Case No. 2:05-CV-02087

Dr. Clark offered opinions regarding the potential health risks from exposure to chemicals present in and emanating from the soil and into the air at a site formerly operated by the defendant using the regulatory guidance framework from USEPA and DTSC. The evaluation was designed to establish cleanup goals based upon the current and future land uses of the Site. A second objective was to evaluate whether current conditions at the Site put patrons and staff

of the Children's Museum at an elevated potential health risk from exposure to chemicals present in and emanating from the soil and into the air at the Site.

Case Result: : Settlement in favor of plaintiff.

Case: Constance Acevedo, et al., V. California Spray-Chemical Company, et al., Superior Court Of The State Of California, Connty Of Santa Cruz. Case No. CV 146344

Dr. Clark performed a comprehensive exposure assessment of community members exposed to toxic metals from a former lead arsenate manufacturing facility. The former manufacturing site had undergone a DTSC mandated removal action/remediation for the presence of the toxic metals at the site. Opinions were presented regarding the elevated levels of arsenic and lead (in attic dust and soils) found throughout the community and the potential for harm to the plaintiffs in question.

Case Result: Settlement in favor of defendant.

Case: Lori Lynn Moss and Rand Moss, et al. V. Venoco, Inc. et al. Superior Court of the State of California, County of Los Angeles, Central Civil West. Case Number BC 297083

Client: Baron & Budd, PC. Dallas, TX.

Dr. Clark performed a comprehensive exposure assessment of plaintiffs (former students at a school adjacent to the plant) to dioxin-like compounds from a large urban electrical utility generator and from multiple oil and gas production facilities adjacent to an active school. Modeling of emissions has confirmed that emissions from the facilities have impacted the school, resulting in significant exposure to carcinogens and neurotoxins. Intensive modeling results (from physical and numerical models) were used to determine a daily dose of contaminants from multiple sites over decades of exposure.

Case Result: Under Appeal.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client – Confidential

Dr. Clark is performing a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a coke production facility to determine the impacts on the surrounding communities. The results of the dispersion model will be used to estimate acute and chronic exposure concentrations to multiple contaminants and will be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark is performing a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model will be used to estimate acute and chronic exposure concentrations to multiple contaminants and will be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark is performing a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

Client – Los Angeles Alliance for a New Economy (LAANE), Los Angeles, California

Dr. Clark is advising the LAANE on air quality issues related to current flight operations at the Los Angeles International Airport (LAX) operated by the Los Angeles World Airport (LAWA) Authority. He is working with the LAANE and LAX staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client – City of Santa Monica, Santa Monica, California

Dr. Clark is advising the City of Santa Monica on air quality issues related to current flight operations at the facility. He is working with the City staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client: Omnitrans, San Bernardino, California

Dr. Clark managed a public health survey of three communities near transit fueling facilities in San Bernardino and Montclair California in compliance with California Senate Bill 1927. The survey included an epidemiological survey of the effected communities, emission surveys of local businesses, dispersion modeling to determine potential emission concentrations within the communities, and a comprehensive risk assessment of each community. The results of the study were presented to the Governor as mandated by Senate Bill 1927.

Client: Confidential, San Francisco, California

Summarized cancer types associated with exposure to metals and smoking. Researched the specific types of cancers associated with exposure to metals and smoking. Provided causation analysis of the association between cancer types and exposure for use by non-public health professionals.

Client: Confidential, Minneapolis, Minnesota

Prepared human health risk assessment of workers exposed to VOCs from neighboring petroleum storage/transport facility. Reviewed the systems in place for distribution of petroleum hydrocarbons to identify chemicals of concern (COCs), prepared comprehensive toxicological summaries of COCs, and quantified potential risks from carcinogens and non-carcinogens to receptors at or adjacent to site. This evaluation was used in the support of litigation.

Client – United Kingdom Environmental Agency

Dr. Clark is part of team that performed comprehensive evaluation of soil vapor intrusion of VOCs from former landfill adjacent residences for the United Kingdom's Environment Agency. The evaluation included collection of liquid and soil vapor samples at site, modeling of vapor migration using the Johnson Ettinger Vapor Intrusion model, and calculation of site-specific health based vapor thresholds for chlorinated solvents, aromatic hydrocarbons, and semi-volatile organic compounds. The evaluation also included a detailed evaluation of the use, chemical characteristics, fate and transport, and toxicology of chemicals of concern (COC). The results of the evaluation have been used as a briefing tool for public health professionals.

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: Ameren Services, St. Louis, Missouri

Managed the preparation of a comprehensive human health risk assessment of workers and residents at or near an NPL site in Missouri. The former operations at the Property included the servicing and repair of electrical transformers, which resulted in soils and groundwater beneath the Property and adjacent land becoming impacted with PCB and chlorinated solvent compounds. The results were submitted to U.S. EPA for evaluation and will be used in the final ROD.

Client: City of Santa Clarita, Santa Clarita, California

Dr. Clark is managing the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordnance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Imminent and Substantial Endangerment Order. Dr. Clark is assisting the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of perchlorate in environment. As part SWAPE's perchlorate research program, Dr. Clark evaluated the production, use, chemical characteristics, fate and transport, toxicology, and remediation of perchlorate. Perchlorates form the basis of solid rocket fuels and have recently been detected in

water supplies in the United States. The results of this research were presented to the USEPA, National GroundWater, and ultimately published in a recent book entitled *Perchlorate in the Environment*.

Client – Confidential, Los Angeles, California

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review of available data on the history of pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

Client: Confidential, San Francisco, California

Identified and analyzed fifty years of epidemiological literature on workplace exposures to heavy metals. This research resulted in a summary of the types of cancer and non-cancer diseases associated with occupational exposure to chromium as well as the mortality and morbidity rates.

Client: Confidential, San Francisco, California

Summarized major public health research in United States. Identified major public health research efforts within United States over last twenty years. Results were used as a briefing tool for non-public health professionals.

Client: Confidential, San Francisco, California

Quantified the potential multi-pathway dose received by humans from a pesticide applied indoors. Part of team that developed exposure model and evaluated exposure concentrations in a comprehensive report on the plausible range of doses received by a specific person. This evaluation was used in the support of litigation.

Client: Covanta Energy, Westwood, California

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

Client – United Kingdom Environmental Agency

Oversaw a comprehensive toxicological evaluation of methyl-*tertiary* butyl ether (MtBE) for the United Kingdom's Environment Agency. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MtBE. The results of the evaluation have been used as a briefing tool for public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of *tertiary* butyl alcohol (TBA) in municipal drinking water system. TBA is the primary breakdown product of MtBE, and is suspected to be the primary cause of MtBE toxicity. This evaluation will include available information on the production, use, chemical characteristics, fate and transport in the environment, absorption, distribution, routes of detoxification, metabolites, carcinogenic potential, and remediation of TBA. The results of the evaluation were used as a briefing tool for non-public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of methyl *tertiary* butyl ether (MTBE) in municipal drinking water system. MTBE is a chemical added to gasoline to increase the octane rating and to meet Federally mandated emission criteria. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MTBE. The results of the evaluation have been used as a briefing tool for non-public health professionals.

Client – Ministry of Environment, Lands & Parks, British Columbia

Dr. Clark was part of a team at SWAPE selected to develop water quality guidelines for methyl tertiary-butyl ether (MTBE) to protect water uses in British Columbia (BC). The water uses to be considered includes freshwater and marine life, wildlife, industrial, and agricultural (e.g., irrigation and livestock watering) water uses. Guidelines from other jurisdictions for the protection of drinking water, recreation and aesthetics were to be identified.

Client: Confidential, Los Angeles, California

Prepared physiologically based pharmacokinetic (PBPK) assessment of lead risk of receptors at middle school built over former industrial facility. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client: Kaiser Venture Incorporated, Fontana, California

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Client: Confidential, Atlanta, Georgia

Researched potential exposure and health risks to community members potentially exposed to creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin compounds used at a former wood treatment facility. Prepared a comprehensive toxicological summary of the chemicals of concern, including the chemical characteristics, absorption, distribution, and carcinogenic potential. Prepared risk characterization of the carcinogenic and non-carcinogenic chemicals based on the exposure assessment to quantify the potential risk to members of the surrounding community. This evaluation was used to help settle class-action tort.

Client: Confidential, Escondido, California

Prepared comprehensive Preliminary Endangerment Assessment (PEA) of dense non-aqueous liquid phase hydrocarbon (chlorinated solvents) contamination at a former printed circuit board manufacturing facility. This evaluation was used for litigation support and may be used as the basis for reaching closure of the site with the lead regulatory agency.

Client: Confidential, San Francisco, California

Summarized epidemiological evidence for connective tissue and autoimmune diseases for product liability litigation. Identified epidemiological research efforts on the health effects of medical prostheses. This research was used in a meta-analysis of the health effects and as a briefing tool for non-public health professionals.

Client: Confidential, Bogotá, Columbia

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of a 13.7 hectares plastic manufacturing facility in Bogotá, Colombia. The risk assessment was used as the basis for the remedial goals and closure of the site.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally cadmium) and VOCs from soil and soil vapor at 12-acre former crude oilfield and municipal landfill. The site is currently used as a middle school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and was used as the basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Managed remedial investigation (RI) of heavy metals and volatile organic chemicals (VOCs) for a 15-acre former manufacturing facility. The RI investigation of the site included over 800 different sampling locations and the collection of soil, soil gas, and groundwater samples. The site is currently used as a year round school housing approximately 3,000 children. The Remedial Investigation was performed in a manner that did not interrupt school activities and met the time restrictions placed on the project by the overseeing regulatory agency. The RI Report identified the off-site source of metals that impacted groundwater beneath the site and the sources of VOCs in soil gas and groundwater. The RI included a numerical model of vapor intrusion into the buildings at the site from the vadose zone to determine exposure concentrations and an air dispersion model of VOCs from the proposed soil vapor treatment system. The Feasibility Study for the Site is currently being drafted and may be used as the basis for granting closure of the site by DTSC.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally lead), VOCs, SVOCs, and PCBs from soil, soil vapor, and groundwater at 15-acre former manufacturing facility. The site is currently used as a year round school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and will be basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of VOC vapor intrusion into classrooms of middle school that was former 15-acre industrial facility. Using the Johnson-Ettinger Vapor Intrusion model, the evaluation determined acceptable soil gas concentrations at the site that did not pose health threat to students, staff, and residents. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client –Dominguez Energy, Carson, California

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of 6-acre portion of a 500-acre oil and natural gas production facility in Carson, California. The risk assessment was used as the basis for closure of the site.

Kaiser Ventures Incorporated, Fontana, California

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

ANR Freight - Los Angeles, California

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

Kaiser Ventures Incorporated, Fontana, California

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

Unocal Corporation - Los Angeles, California

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

Client: Confidential, Los Angeles, California

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years. In its oversight role, SWAPE is working with the overseeing regulatory agency to investigate the source, magnitude, extent and fate of contamination, and develop a remedy for the site.

Client: Confidential, San Francisco, California

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

Client: Confidential, San Francisco, California

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

IT Corporation, North Carolina

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

Professional Associations

American Public Health Association (APHA)

Association for Environmental Health and Sciences (AEHS)

California Redevelopment Association (CRA)

International Society of Environmental Forensics (ISEF)

Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:**Books and Book Chapters**

Sullivan, P., J.J. J. Clark, F.J. Agardy, and P.E. Roscnfeld. (2007). *Synthetic Toxins In The Food, Water and Air of American Cities*. Elsevier, Inc. Burlington, MA.

Sullivan, P. and J.J. J. Clark. 2006. *Choosing Safer Foods, A Guide To Minimizing Synthetic Chemicals In Your Diet*. Elsevier, Inc. Burlington, MA.

Sullivan, P., Agardy, F.J., and J.J.J. Clark. 2005. *The Environmental Science of Drinking Water*. Elsevier, Inc. Burlington, MA.

Sullivan, P.J., Agardy, F.J., Clark, J.J.J. 2002. *America's Threatened Drinking Water: Hazards and Solutions*. Trafford Publishing, Victoria B.C.

Clark, J.J.J. 2001. "TBA: Chemical Properties, Production & Use, Fate and Transport, Toxicology, Detection in Groundwater, and Regulatory Standards" in *Oxygenates in the Environment*. Art Diaz, Ed.. Oxford University Press: New York.

Clark, J.J.J. 2000. "Toxicology of Perchlorate" in *Perchlorate in the Environment*. Edward Urbansky, Ed. Kluwer/Plenum: New York.

Clark, J.J.J. 1995. Probabilistic Forecasting of Volatile Organic Compound Concentrations At The Soil Surface From Contaminated Groundwater. UMI.

Baker, J.; Clark, J.J.J.; Stanford, J.T. 1994. Ex Situ Remediation of Diesel Contaminated Railroad Sand by Soil Washing. Principles and Practices for Diesel Contaminated Soils, Volume III. P.T. Kostecki, E.J. Calabrese, and C.P.L. Barkan, eds. Amherst Scientific Publishers, Amherst, MA. pp 89-96.

Journal and Proceeding Articles

- Wu, C., Tam, L., **Clark, J.**, and Rosenfeld, P. (2009). Dioxin and Furan Blood Lipid Concentrations In Populations Living Near Four Wood treatment Facilities In The United States. *In Air Pollution XVII*, Edited by C.A. Brebbia and V. Popov. Pp 319-327.
- Tam L. K., Wu C. D., **Clark J. J.** and Rosenfeld, P.E. (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetraachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, Volume 70 (2008) page 002254.
- Tam L. K., Wu C. D., **Clark J. J.** and Rosenfeld, P.E. (2008) Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, Volume 70 (2008) page 000527
- Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** (2007). "Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *Environmental Research*. 105:194-199.
- Rosenfeld, P.E., **Clark, J. J.**, Hensley, A.R., and Suffet, I.H. 2007. "The Use Of An Odor Wheel Classification For The Evaluation of Human Health Risk Criteria For Compost Facilities" *Water Science & Technology*. 55(5): 345-357.
- Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** 2006. "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.
- Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13th Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.
- Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.
- Clark, J.J.J.** 2003. "Manufacturing, Use, Regulation, and Occurrence of a Known Endocrine Disrupting Chemical (EDC), 2,4-Dichlorophenoxyacetic Acid (2,4-D) in California Drinking Water Supplies." National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Minneapolis, MN. March 20, 2003.
- Rosenfeld, P. and **J.J.J. Clark**. 2003. "Understanding Historical Use, Chemical Properties, Toxicity, and Regulatory Guidance" National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Phoenix, AZ. February 21, 2003.
- Clark, J.J.J.**, Brown A. 1999. Perchlorate Contamination: Fate in the Environment and Treatment Options. In Situ and On-Site Bioremediation, Fifth International Symposium. San Diego, CA, April, 1999.
- Clark, J.J.J.** 1998. Health Effects of Perchlorate and the New Reference Dose (RfD). Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

- Browne, T., **Clark, J.J.J.** 1998. Treatment Options For Perchlorate In Drinking Water. Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.
- Clark, J.J.J.**, Brown, A., Rodriguez, R. 1998. The Public Health Implications of MBE and Perchlorate in Water: Risk Management Decisions for Water Purveyors. Proceedings of the National Ground Water Association, Anaheim, CA, June 3-4, 1998.
- Clark J.J.J.**, Brown, A., Ulrey, A. 1997. Impacts of Perchlorate On Drinking Water In The Western United States. U.S. EPA Symposium on Biological and Chemical Reduction of Chlorate and Perchlorate, Cincinnati, OH, December 5, 1997.
- Clark, J.J.J.**; Corbett, G.E.; Kerger, B.D.; Finley, B.L.; Paustenbach, D.J. 1996. Dermal Uptake of Hexavalent Chromium In Human Volunteers: Measures of Systemic Uptake From Immersion in Water At 22 PPM. *Toxicologist*. 30(1):14.
- Dodge, D.G.; **Clark, J.J.J.**; Kerger, B.D.; Richter, R.O.; Finley, B.L.; Paustenbach, D.J. 1996. Assessment of Airborne Hexavalent Chromium In The Home Following Use of Contaminated Tapwater. *Toxicologist*. 30(1):117-118.
- Paulo, M.T.; Gong, H., Jr.; **Clark, J.J.J.** (1992). Effects of Pretreatment with Ipratropium Bromide in COPD Patients Exposed to Ozone. *American Review of Respiratory Disease*. 145(4):A96.
- Harber, P.H.; Gong, H., Jr.; Lachenbruch, A.; **Clark, J.**; Hsu, P. (1992). Respiratory Pattern Effect of Acute Sulfur Dioxide Exposure in Asthmatics. *American Review of Respiratory Disease*. 145(4):A88.
- McManus, M.S.; Gong, H., Jr.; Clements, P.; **Clark, J.J.J.** (1991). Respiratory Response of Patients With Interstitial Lung Disease To Inhaled Ozone. *American Review of Respiratory Disease*. 143(4):A91.
- Gong, H., Jr.; Simmons, M.S.; McManus, M.S.; Tashkin, D.P.; Clark, V.A.; Detels, R.; **Clark, J.J.** (1990). Relationship Between Responses to Chronic Oxidant and Acute Ozone Exposures in Residents of Los Angeles County. *American Review of Respiratory Disease*. 141(4):A70.
- Tierney, D.F. and **J.J.J. Clark**. (1990). Lung Polyamine Content Can Be Increased By Spermidine Infusions Into Hyperoxic Rats. *American Review of Respiratory Disease*. 139(4):A41.



Technical Consultation, Data Analysis and
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Matthew F. Hagemann, P.G.

**Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Regulatory Compliance
CEQA Review
Expert Witness**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certification:

California Professional Geologist, License Number 8571.

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Senior Environmental Analyst, Komex H2O Science, Inc (2000 – 2003);
- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);

- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Lead analyst in the review of numerous environmental impact reports under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions and geologic hazards.
- Lead analyst in the review of environmental issues in applications before the California Energy Commission.
- Technical assistance and litigation support for vapor intrusion concerns.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.
- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of

wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.
- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.

- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and Hagemann, M., 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and Hagemann, M.F. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Attachment D

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 622-5491
FAX (510) 286-5559
TTY 711



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April 21, 2010

NAP029865
NAP-29-3.93

Mr. Chris Cahill
Conservation Development and Planning Department
County of Napa
1195 Third Street, Suite 210
Napa, CA 94559

SCH 2010032066

Dear Mr. Cahill:

NAPA GREENWOOD COMMERCE CENTER PROJECT – MITIGATED NEGATIVE DECLARATION (MND)

Thank you for continuing to include the California Department of Transportation (Department) in the environmental review process for the Napa Greenwood Commerce Center project. The following comments are based on the MND. Our previous comments still apply and are incorporated here by reference.

Forecasting

4.1 Please augment the traffic impact study (TIS) to include analysis under 2030 Cumulative and 2030 Cumulative Plus project conditions. Also show AM and PM peak hour turning traffic per study intersection under Project Only conditions. Provide a discussion elaborating on the underlying assumption and methodology about 2030 AM and PM Peak Hour traffic.

Please feel free to call or email Sandra Finegan of my staff at (510) 622-1644 or sandra_finegan@dot.ca.gov with any questions regarding this letter.

Sincerely,

LISA CARBONI
District Branch Chief
Local Development – Intergovernmental Review

DEPARTMENT OF TRANSPORTATION

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*Flex your power!
Be energy efficient!*



March 3, 2010

NAP029865
NAP-29-3.93

Mr. Chris Cahill
Conservation Development and Planning Department
County of Napa
1195 Third Street, Suite 210
Napa, CA 94559

Dear Mr. Cahill:

NAPA GREENWOOD COMMERCE CENTER PROJECT - TRAFFIC IMPACT STUDY (TIS)

Thank you for continuing to include the California Department of Transportation (Department) in the early stages of the environmental review process for the Napa Greenwood Commerce Center project. The following comments are based on the TIS. Our previous comments still apply and are incorporated here by reference.

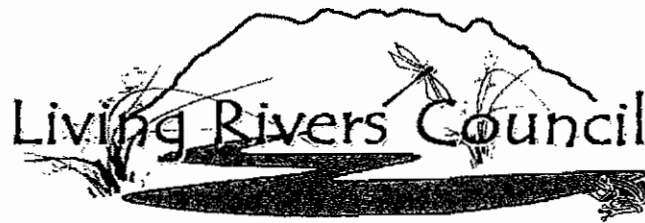
- 4.2 | 1. Please provide AM and PM Peak Hour turning movement volumes for each study intersection under Project Only Conditions, 2030 Cumulative Conditions Only, and 2030 Cumulative Plus Project Conditions.
- 4.3 | 2. The project must include extending the existing northbound (NB) left turn lane at the state route (SR) 29/Airport Boulevard intersection in order to accommodate the Plus Project queue. Please be reminded that a left turn lane requires both storage and deceleration length. For design specifications, please refer to the Department's Highway Design Manual, Index 405.2

Please feel free to call or email Sandra Finegan of my staff at (510) 622-1644 or sandra_finegan@dot.ca.gov with any questions regarding this letter.

Sincerely,

LISA CARBONI
District Branch Chief
Local Development - Intergovernmental Review

Attachment E



Living Rivers Council
1370 Trancas
PMB 614
Napa, California, 94559
(707) 255-7434
(707) 259-1097 fax
cmalan@myonearth.org

Chris Cahill, Planner
Napa County
Conservation, Development & Planning Department
1195 Third Street, Suite 210
Napa, CA 94559

RECEIVED

MAY 20 2010

NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

May 17, 2010

Re: Napa 34 Holdings Commercial Center, Use Permit PO-00330-TPM

Since the Carpenters Union submitted a letter containing evidence of significant environmental impacts which should result in an Environmental Impact Report we have additional environmental concerns that should be addressed for the project.

5.1 The wetlands had been substantially degraded by cattle owned by previous owners. The wetlands should be restored and re-vegetated to improve the habitat for animals associated with that ecological niche. ✓ u-

A barrier should be erected to prevent terrestrial wetland animals from attempting to cross high speed traffic on the highway and redirected to the stream culvert under the highway. A wildlife corridor setback should be established to parallel the adjacent stream channel to provide a wildlife corridor.

Roadway and parking lot runoff should be filtered and an oil entrapment system installed to prevent contaminants from polluting the wetland and the adjacent stream.

Landscaping should utilize native plant species to restore some of the original vegetation at the site. Chemical spraying should be prohibited to avoid contaminated runoff into the wetland area.

Sincerely,
Chris Malan
John Stephens