Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #12

Wednesday, July 29, 2009

SCAQMD, Room GB, 10:00 AM – 12:00 PM

1. Welcome and Introductions

Dr. Steve Smith, Program Supervisor of South Coast Air Quality Management District's (SCAQMD) CEQA Section, called the meeting to order at 10:03 A.M. and asked for self introductions of the working group members and SCAQMD staff. Dr. Smith then presented an overview of the meeting agenda.

2. Status of GHG Threshold Analysis for the Residential/Commercial Development Projects

Dr. Smith provided an update regarding the status of the greenhouse gas (GHG) significance threshold analysis for residential/commercial projects. On June 15, 2009, SCAQMD staff received a database from the Office of Planning and Research (OPR) of 798 projects with environmental impact reports (EIRs) and mitigated negative declarations (MNDs) prepared and submitted to OPR in the years 2007 and 2008. Staff reviewed the database and eliminated 60 projects because: they did not provide sufficiently detailed project descriptions (e.g., square footage, units, etc.) were zone changes or modifications, were CEQA documents for redundant projects (i.e., subsequent CEQA documents for the same project), and/or were regional general/master/specific plans. General/master/specific plans documents were specifically excluded because they are comprised of large regional multiuse projects as opposed to individual projects undertaken at the local level.

Direct carbon dioxide (CO2) emissions from the remaining 738 projects were calculated using the Urban Emissions 2007 (URBEMIS2007) model and presented in an Excel spreadsheet. Separate URBEMIS2007 analyses were performed for residential and commercial projects using the model's default factors except that the default trip rate factor was modified to include weighted trip rates to reflect trips during the week days and weekends according to land use type. Mixed use projects were divided into their component parts, either residential or commercial and then incorporated into the appropriate dataset. Indirect CO2 equivalent (CO2e) emissions generated from electricity usage and water-related electricity usage were then calculated for each project in the residential and commercial databases. Natural gas usage is already included the direct emissions from area sources calculated in the URBEMIS2007 model. Electricity and water-related electricity usage emission factors for the residential sector were specific for the southern California region, but only statewide emission factors were available for the commercial sector. The direct and indirect CO2e emissions were then summed for all projects in both the residential and commercial databases to obtain total annual CO2e emissions. The 90 percent capture rate for residential projects ranged from 8,580 metric tons (MT)CO2e/year (210 units) to 9,151 MTCO2e/year (224 units). The 90 percent capture rate for commercial projects ranged from 2,427 MTCO2e/year (126,705 sq. ft.) to 3,041 MTCO2e/year (158,930 sq. ft.).

Dr. Smith provided an update on the 282 projects collected pursuant to the original GHG work plan from SCAQMD's existing intergovernmental review (IGR) database for the years 2007 and 2008. Only 23 residential and 61 commercial projects were evaluated to obtain GHG emission impact results. The remaining 198 projects were not analyzed because they were mixed use (mixed use projects were originally excluded because it was unclear how to evaluate emissions from these projects compared to residential or commercial projects) general/specific plans, or had insufficient data to quantify GHG emissions. The SCAQMD's database resulted in different 90 percent emissions capture rates compared to the results of the OPR database. The 90 percent GHG emissions capture rate for residential projects ranged from 4,866 to 6,241 MTCO2e/year. For commercial projects the 90 percent GHG emissions capture rate ranged from 25,816 to 26,909 MTCO2e/year. Staff noted that the difference in the 90 percent GHG emission capture rates between the SCAQMD database and the OPR database may be an artifact due to the small sample size of the SCAQMD's database. The SCAQMD database is much smaller than the OPR database and, because both databases cover the same timeframe (2007 through 2008), the SCAQMD database is considered to be a subset of the whole OPR database and, therefore, it may not be representative of GHG emissions from projects in the region. Thus, SCAQMD staff recommended using the OPR database only.

Other considerations relative to the database include deriving region-specific GHG emission rates and determining a future energy profile because the GHG emission factors are based on the current energy generation portfolio and does not the renewable fuels portfolio. Further, the GHG emission factors do not reflect the current Title 24 energy efficiency standards that will be applied to future projects.

Comments/Questions on the Residential/Commercial GHG Significance Threshold Survey

- A working group member questioned whether southern California included such counties as San Diego or Imperial. Dr. Smith reiterated that the OPR database included only those projects in the four-county region, which constitutes the jurisdiction of the SCAQMD. There may, however, be projects in the non-district portion of San Bernardino County.

- Another working group member questioned whether the OPR database showed an equal distribution of projects between the four counties. No analysis was performed to equalize the number of projects from each district county. Staff felt it was more useful to use the entire OPR database rather than eliminating projects to provide equal distributions of projects by district county.

- A followed up questioning was asked regarding whether there is a distinction between projects in higher density areas compared to lower density rural areas. Such a difference would change the trip rates. Staff responded that the URBEMIS2007 model uses trip rates based on land use type from the ITE Trip Generation Manual. Further, the model has the ability to take density into account when analyzing trips. With regard

to the assumptions used in evaluating OPR data, the single family dwelling was used as a residential unit.

- It was noted that the SCAQMD database included a variety of different sizes and that a potential numerical threshold based on the 90 percent emissions capture rate for residential projects was lower using the SCAQMD database compared to using the OPR database. Staff again noted that the lower capture rate was likely an artifact of the smaller sample size. SCAQMD staff recommended, and the working group agreed, that the larger OPR database should be used because it is a larger survey pool of projects and, as such, would be expected to provide more accurate results. In addition, it is expected that the OPR database includes all of the projects in the SCAQMD's database.

- Since there was a consideration to eliminate projects in the SCAQMD database with high GHG emissions (outliers), why not exclude the outliers in the OPR database? Staff responded that review of the outliers in the SCAQMD's database indicated that there may have been a calculation error or an inappropriate assumption was used, e.g., methane emission factors were substantially higher than the CO2 emission factors, which is not normally the case. Further, including such outlier projects could inappropriately skew the emissions data and the resulting 90 percent emissions capture rate results. Alternatively, the GHG emissions for projects in the OPR database were calculated consistently using the URBEMIS model based on project characteristics provided by OPR.

- One working group member asked why there was a difference in the original number of projects in the database that OPR provided, 798 projects, compared to the number or projects analyzed by staff, 738 projects. Staff responded that the original OPR database was evaluated before any analysis was performed and projects were eliminated because of lack of data; the project consisted of a zone change; or it consisted of a specific, master, or general plan. Eliminating these projects reduced the original database from 798 projects to 738 projects. The OPR database was then divided between residential and commercial projects. Mixed use projects were divided according to their residential and commercial features (i.e., number of residential units and commercial square footage). Projects consisting of, or including offices were excluded from the revised OPR database. The revised OPR database, therefore, consisted of two new sub-databases, 524 residential projects and 266 commercial projects, totaling 780 projects.

- One working group member suggested caution using California Energy Commission (CEC) data because the electricity usage factors change throughout the region. Staff agreed that using the CEC factors may not be representative for all areas. Further, if available, local electricity usage would be incorporated into the analysis.

- A follow-up question was asked regarding why the mixed use projects were separated into their component residential and commercial components and considered as two separate projects. GHG emissions calculated from separated mixed use projects do not accurately represent the individual projects because there is any economy of scale when building mixed use projects, e.g., fewer vehicle trips and/or shorter trip lengths, etc. As

a result, mixed use projects would be expected to generate lower GHG emissions than the sum of their residential and commercial parts. Since the current trend in land use projects is for mixed use projects, which should be encouraged, creating two separate databases may discourage, to a certain extent, development of future mixed use projects. It was suggested that SCAQMD staff combine the residential and commercial sub-databases into a single database and establish a single GHG significance threshold. Staff agreed to perform the analysis using a database consisting of residential and commercial database. The database would also include the mixed use projects as single projects, not split into their component parts.

3. Recent Attorney General's Comments on GHGs for General Plans

On July 13, 2009, the California Attorney General's (AG) Office submitted a comment letter to the County of Sacramento (County) regarding its General Plan. The comment letter noted that the CEQA document analyzed the impacts of future growth using the assumption that future growth would be twice as much as would be necessary to meet projected future demand. However, the AG's comment letter noted that the County needs to more aggressively mitigate impacts through: feasible alternatives, adoption of a phased development approach, and city-county coordination to optimize growth and reduce GHG emissions. With regard to mitigation measures, efficiency-based performance standards are acceptable as long as the lead agency is able to show that those performance standards, together with all other measures and strategies, are likely to achieve the emission reduction targets in the General Plan. In addition, the AG's letter recommended that the GHG mitigation measures in the Climate Action Plan to be developed should be included in the General Plan and should demonstrate a reduction in vehicle miles traveled (VMT).

Comments on Attorney General's Comment Letter

- One working group member noted that the General Plan update is a good time to include a GHG emission reduction element.

- A second working group member agreed stating, "substantial evidence" required by CEQA is best proven through General Plan compliance.

- A comment was made that if the current results of the analysis are used to establish numerical thresholds, they do not fulfill the "substantial evidence" test. Further, if the current results are used as numerical thresholds a large number of projects would fall under such thresholds and would not be required to implement measures to reduce GHG emissions. All projects should be subject to some kind of GHG reduction requirement (or performance standard). Staff responded that one option could be similar to an option being considered by by Bay Area AQMD that requires all projects to comply with a GHG reduction performance standard based on the size of the projects, with projects below a certain size being required to reduce GHG emissions by five percent. However, if all projects must incorporate GHG reduction measures to reduce GHG emissions by a certain percent, it would be more appropriate to establish a

rule, regulation or state law similar to Title 24 requirements, which would be applied to existing and new projects over time.

4. General Comments

- A question was asked regarding whether or not the SCAQMD is coordinating its GHG significance threshold development process with similar efforts by other air districts. Staff is monitoring GHG significance threshold proposals currently in progress by other air districts through CAPCOA and directly with some of the other air districts. However, it is not necessarily expected that SCAQMD staff will develop the same or similar thresholds as other districts or use the same methodologies to develop thresholds. Staff reiterated, however, that the best approach would be statewide GHG threshold(s) developed at the state level.

- A working group member asked when staff anticipates taking a GHG significance threshold proposal for residential and commercial projects to the Governing Board for adoption. Staff responded that the tentative schedule is to take significance threshold(s) for residential and commercial projects to the Board for consideration in fall 2009.

- A follow-up question was asked regarding what the GHG significance threshold would "look like?" Although there was initial reluctance on staff's part to develop a numerical GHG significance threshold, SCAQMD's staff's tiered approach recommendation, which includes a numerical threshold (Tier 3) appeared to be an acceptable proposal by most stakeholders because it requires a quantitative GHG analysis for all nonexempt projects in order to justify the significance determination, which may then trigger mitigation requirements, consistent with current CEQA requirements.

- A second follow-up question was asked regarding whether or not those projects below the numerical significance threshold would still be required to comply with some kind of performance standard (e.g., percent reduction.). Staff responded that staff's currently recommended tiered approach does not include a requirement for all projects to reduce GHG emissions by a certain percent and reiterated that a rule, regulation, or statewide law would be more appropriate to obtain GHG emission reductions from all projects.

- From a "legal perspective," one working group member expressed the concern that a numerical threshold could be construed as a de minimus level, which is not allowed under CEQA. Any numerical GHG significance threshold must be legally defensible. In response, a second working group member suggested that staff perform a review and develop criteria for what would be a legally defensible approach for developing a numerical GHG significance threshold.

- A working group member believed a 90 percent emission capture rate was not an appropriate cut-off because projects below that level (e.g., 210 residential units) are still large projects that should be required to reduce GHG emissions "given the context of the GHG problem." A possible solution was suggested that using a higher emissions

capture rate or, alternatively, using a project size capture rate could be the basis for establishing a lower numerical threshold. This approach may be more legally defensible and less vulnerable to a "fair argument" legal standard.

- One working group member reminded the working group of the importance in accurately calculating GHG emissions (i.e., what sources should be considered when quantifying GHG emissions from a project). Further, since the URBEMIS model is currently the primary tool used to quantify GHG emissions (and construction and operational emissions), it needs to be updated to provide the most accurate method of quantifying GHG emissions. Staff agreed that the model needs to be updated to more accurately quantify GHG emissions. A scope of work has been drafted to revise the GHG component to more accurately quantify GHG emissions. There are, however, some issues that need to be resolved before the model can be updated. Another working group member agreed that more accurate quantification of GHG emissions is necessary, noting that if GHG emissions are not accurately calculated there may be problems determining when mitigation measures should be imposed.

- A follow-up concern was expressed that the assumption that all trips are new trips does not accurately reflect the real world situation. For example, trips associated with new residential units are not necessarily new trips, but may actually be displaced trips that existed somewhere else. In this situation, staff recommends that projects should to be evaluated on a case-by-case basis and, if there is enough evidence to support the assumption that trips generated by a new projects are displaced, then this assumption could be used in the analysis.

5. Other Topics

None.

6. Closing Remarks

The next meeting is scheduled for August 26, 2009 in meeting room GB at 10:00 AM.

7. Other Business

None.

MEMBERS PRESENT (14)

James Arnone – Latham & Watkins – *on conference call*
Debbie Stevens – Refineries
Doug Feremenga – San Bernardino County Land Use Planning Department
Patrick Griffith for Greg Adams – City of Los Angeles Bureau of Sanitation
Michael Hendrix – Association of Environmental Professionals (AEP)
Shari Libicki – Green Developers Coalition
Clayton Miller – Construction Industry Air Quality Coalition (CIAQC)
Peter Okurowski – Pillsbury Law– *on conference call*

Bill Piazza – Los Angeles Unified School District (LAUSD)
Janill Richards –Attorney General's Office – *on conference call*
Matt Vespa – Center for Biological Diversity (CBD) – *on conference call*
Carla Walecka – Realtors Committee on Air Quality (RCAQ)
Lee Wallace – Sempra Energy Utilities
Michael Wang for Cathy Reheis-Boyd – Western State Petroleum Association (WSPA)

OTHERS PRESENT (8)

Lilia Barker – LADWP - – *on conference call*
Marcia Baverman for Debbie Stevens – Environmental Audit, Inc.
Adam Moke – City of Los Angeles Bureau of Sanitation
Danielle Morone – Gatzke, Dillon & Balance, LLP – *on conference call*
Haseeb Qureshi – Urban Crossroads
Greg Tholen – Bay Area Air Quality Management District – *on conference call*
Christina Tran – LA County Planning – *on conference call*
Suzanne Wilson – Public Utilities Department

AQMD STAFF PRESENT (8)

Elaine Chang – Deputy Executive Officer
Steve Smith – Program Supervisor
Daniel Garcia – Air Quality Specialist
Jeff Inabinet – Air Quality Specialist
James Koizumi – Air Quality Specialist
Mike Krause – Air Quality Specialist
Gordon Mize – Air Quality Specialist
Barbara Radlein – Air Quality Specialist