

April 12, 2017

Questions and Answers – RFQ 2017-001 Air Quality Data Analyses, Modeling and Health Impact Assessments

1. What is the District’s anticipated term for any contract awards stemming from this RFQ (beginning to ending date)?

No specific beginning and end dates are identified. A work statement may be developed and a contract may be awarded at any time as District needs arises. The beginning and end dates will be determined based on the nature of consultation.

2. What type of “work samples” are you requesting (reports, journal papers, etc.)? Certain project reports may be quite lengthy, potentially adding hundreds of printed pages to the hard copy. Would executive summaries or abstracts be sufficient?

Yes. Executive summaries or abstracts are sufficient. For journal articles, you may just provide a reference.

3. The evaluation criteria include “Approach” (methodology with respect to the anticipated scope of services). There is no explicit section in the District’s required response outline to accommodate an approach. Would that fall under Section 1, sub-section “g. Additional Information”? Would the 10-page limit apply to any proposed approach?

Yes, you can insert your approach in this section. Yes, the page limit applies.

4. If full resumes are provided for all assigned personnel, will those documents count against the 10-page limit, or can they be provided in an appendix? (This will help determine how many resumes we can provide.)

Resumes will not be counted against the 10-page limit.

5. The table of scoring criteria on Page 7 assigns 25 points to “Approach.” Will the evaluation of our technical approach be based on work samples submitted, or some other information?

This scoring criterion is not limited to the “technical” approach. Please see the description of this section.

6. What are the most current versions of the CMAQ, CAMX, and WRF models being used by BAAQMD?

CMAQv5.0.2, CMAQv5.1, WRFv3.4 and WRF3.8. Currently CAMx is not used by the District. However, models used and their versions can change at any time based on the District’s needs.

7. Does the District currently use or intend to use two-way WRF-CMAQ coupled modeling?

Currently the two-way WRF-CMAQ coupled model is not used. The District may use it should a need arise.

8. What post-processing tools does the District currently employ or intend to employ in analyzing model inputs and outputs?

Almost all publicly available and several licensed software such as METSTAT, MATLAB, GIS, RIP, VERDI, PAVE as well as several graphics programs developed in-house based mostly on NCAR Graphics and Excel.

9. In providing modeling support does the District allow for remote access or will contractors be expected to be onsite?

The District allows restricted remote access to Linux-based computers to perform modeling.

10. In developing software tools (such as the one mentioned in Example 4 of the RFQ) does the District have a preferred programming language (FORTRAN, C, etc.)?

FORTRAN is a preferred language, but others are acceptable.

11. Does the District have a preference for the hemispheric model mentioned in Example 4 of the RFQ (e.g. GEOS-chem, MOZART)?

No, but MOZART may be a discontinued model.

12. Does the District have a preferred interface tool for use in processing hemispheric air quality modeling data?

No, but the interface tool should be able to handle CB05, CB6, SAPRC99 and SAPRC07 chemical mechanisms. It should be modular for structuring updates to these chemical mechanisms.

13. Can the District provide specifications for their current modeling and programming environment?

- a. What is the Linux distribution currently being used?
- b. What is the version of the Linux Kernel currently being used?

Response to a and b: CentOS6 (these two items are subject to change soon).

- c. What compiler(s) and versions of compilers are currently being used for FORTRAN and C/C++?

PGIv13.8 and GCCv4.2.

- d. What versions of libraries are currently in use such as IOAPI, MPICH, and NETCDF?

This depends on the application. We use the latest version of these when possible.

14. What are the specifications of the modeling hardware, specifically:

a. How many modeling computers are being operated?

14 nodes plus a master node.

b. In general what are the CPU, memory, disk drive, and networking specifications of the machines?

2.4Ghz, 8GB per node, 50TB, respectively.

c. Does the District have machines configured in a networked computing cluster?

Yes, 14 nodes and the master node are networked for cluster computing.

15. Beyond the photochemical grid models (CMAQ and CAMX) experience requested in the RFQ does the District expect bidders to show proficiency in dispersion (AERMOD) or Lagrangian (CALPUFF, SCICHEM, SCIPUFF) models?

No.

16. Does the District anticipate the need for meteorological modeling support other than WRF (such as MM5)?

No.

17. Is developing a conceptual model, such as that referred to in Section II.B of the RFQ, a part of the scope of this RFQ?

Yes.

18. Does the District anticipate a need for parallel programming support for the air quality and meteorological models that will be used?

No.

19. Beyond BenMAP does the District employ other tools to develop health impact assessments?

20. Can the District provide an example of a health impact assessment study for which they would need support?

Response for Questions 19 and 20: The RFQ is limited to four areas of expertise as listed. Health impact assessment is not one of them, i.e., submitting qualifications for health impact analysis is not requested.

21. What is the quality of the hydrocarbon observation data (were data collected as part of a quality assurance program)?

The hydrocarbon data have typical quality for this type of measurement. Yes, data went through first level quality assurance.

22. For what years is hydrocarbon data available? Could we assume hydrocarbon data align with the desired years of WRF data to be used in the modeling analysis?

Canister measurements are continuous and align with simulation years. GC measurements are from 2010 to 2016, align with 2012 and 2016 simulations that the District has been performing.

23. How will the hydrocarbon data be delivered to the selected firm, i.e. how is this data catalogued/in what format will it be made available?

Hydrocarbon data reside in the District SQL database. Data requested will be prepared in the requester's format as the SQL database supports it.