### **DRAFT Air QuALITY Statement of Work TEMPLATE**

### **Exhibit A**

# **STATEMENT OF WORK AND DELIVERY SCHEDULE**

# **Project Name:**

# **Project Location:**

# **WOC No. XXXX , Price Agreement No. XXXXX**

ENVIRONMENTAL CATEGORY:

CATEGORICAL EXCLUSION PROJECTS

FOR PROJECTS LOCATED IN THE

CARBON MONOXIDE (CO) NON-ATTAINMENT OR MAINTENANCE AREAS of

PORTLAND (METRO Boundary), SALEM (SKATS Boundary), EUGENE (\*AQMA), MEDFORD (UGB), GRANTS PASS (CBD), KLAMATH FALLS (UGB)

*[Italicized information provided in brackets consists of instructions or information for the Contract Manager. This information should be deleted before finalizing the language for your contract.]*

**A. WORK ORDER CONTRACT DESCRIPTION, BACKGROUND AND PROJECT DESCRIPTION**

This Work Order Contract (WOC) is between the Oregon Department of Transportation (Agency) and (*provide name of Firm*) (Contractor). The purpose of this WOC is to provide for the preparation of the Air Quality Memorandum for a categorical exclusion project located in an EPA-designated carbon monoxide (CO) non-attainment or maintenance area of Oregon. This WOC is only required if the project requires a CO hot spot analysis. Under this WOC, Contractor shall prepare an air quality analysis and memorandum and any contingency tasks authorized in writing by Agency.

**B. GENERAL CONTRACTOR REQUIREMENTS AND OUTLINE OF WOC TASKS**

Contractor is the Professional of Record for the work, which shall be executed by environmental professionals or other qualified professionals meeting the minimum requirements stated in the Request for Proposals (RFP). Contractor shall be responsible for determining applicable Agency practices and standards to be used in performing the work. Agency will not accept or compensate for Contractor work that is submitted in non-Agency approved format styles and will return this work to Contractor for revision in the correct format at Contractor’s expense.

Contractor shall be responsible for meeting applicable Agency practices and standards to be used in performing the work. Agency will not accept or compensate for Contractor work that is submitted in non-Agency approved format styles and will return this work to Contractor to be revised in the correct format at Contractor’s expense.

This WOC is comprised the following tasks:

|  |  |
| --- | --- |
| Task No. | Heading |
| Task 1 | WOC/Project Management |
| Task 2 | Prepare an Air Quality Analysis and Technical Report |
| Task 3 | Qualitative PM-10 Hot Spot Analysis (Potential Contingency Task) |
| Task 4 | Indirect Source Construction Permit Determination (Potential Contingency Task) |
| Task 5 | Burden Analysis (Potential Contingency Task) |
| Task 6 | Project Closeout |

###### **C. GENERAL ASSUMPTIONS AND REQUIREMENTS APPLICABLE TO ALL TASKS AND CONTINGENCY TASKS**

* All contingency tasks shall require written approval by Agency before Contractor commences work on task.
* Agency shall be responsible for negotiations with regulatory agencies regarding project requirements, unless that task is specifically assigned in this WOC.
* Contractor shall continuously communicate with Region Environmental Managers (REMs), project leaders, and team members, as required, to stay informed of changes affecting the work. Contractor shall be responsible for informing Agency of issues with the potential to interrupt the conduct of work.
* Contractor will not re-create or reproduce any required work that has been or will be adequately conducted by others.
* Contractor shall schedule enough on-site time to perform the work as required for each task.

**D. REVIEW, COMMENT, AND DELIVERABLE SCHEDULE**

* Contractor shall submit all documents to Agency in Draft and Final format in both hard and electronic copies.
* Contractor shall coordinate with Agency staff to make necessary changes and shall revise Draft as necessary to incorporate Agency review comments.
* Contractor shall incorporate comments within ten (10) working days from receipt by Agency and return the final to Agency staff, unless additional time is granted in writing by Agency.
* The schedule for delivery is identified in each task as number of days from NTP. For contingency tasks this means the number of days from the NTP issued for the respective contingency task. Regardless of the NTP date or schedule identified, all authorized tasks and deliverables must be completed and submitted no later than ten (10) calendar days prior to the expiration date of this WOC.
* Contractor shall provide to Agency’s WPM one (1) electronic copy and (1) hard copy of all drafts prepared pursuant to this WOC.
* Contractor shall provide to Agency one (1) electronic copy and two (2) hard copies of all deliverables prepared pursuant to this WOC unless additional copies are requested by Agency. Final Plan sheets shall have a wet-signed professional seal and be delivered in 11” x 17” Mylar format. If approved by the Agency, then field documentation photography may be provided in electronic format only.
* Contractor shall provide to Agency’s WPM one (1) electronic copy and one (1) hard copy of all research files, data files, field investigations, reports, products and deliverables compiled for this Work Order.
* At the end of the Project, Contractor shall provide to the Agency CDs or other approved storage media with all final deliverables produced. Contractor shall also provide specific interim deliverables produced throughout the project when requested by the Agency.

**Formatting of Deliverables** Guidance for document formatting is found in the Price Agreement between Contractor and Agency. Additional formatting requirements are included below:

* Company logos shall be used on draft and final Contractor-produced studies, technical reports and plan sheet title blocks. Final reports and plans shall comply with state law and Agency policy for engineering and landscape architects. Agency permit or other documentation that Contractor produces shall contain Agency logos when specified by the Agency.
* Contractor shall embed all graphic files into the body of the main document so that the document can be printed from one file.
* Contractor shall also submit all graphic files accompanying reports separately in .jpg or .tif formats unless specified differently by Agency.
* Contractor shall provide deliverables such as field investigation, data, forms, photographs, mapping, technical reports, and memos to Adobe® .pdf format when requested by Agency.
* Each final electronic deliverable shall be provided in MS Office file formats (i.e., Word documents for reports) as well as in Adobe® .pdf format in which all figures, tables, and appendices have been inserted in the appropriate order for final presentation.

E. **TASKS AND DELIVERABLES**

Contractor shall perform any or all the services and provide any or all of the deliverables from the list below and as stipulated in the WOC. Contractor represents and warrants that the Project will be completed on time, within budget, and will meet Agency objectives.

Notwithstanding Agency's approval for involving certain sub-Contractors with respect to particular tasks within this SOW, the Contractor shall be responsible for completing all tasks and providing all deliverables required in the WOC unless specifically identified as an Agency responsibility.

Task 1 WOC/Project Management

Contractor shall provide management of project services under this WOC including contract administration, management of labor and sub-contractor resources, coordination, Project Narrative, and meetings as required to successfully deliver the work of this WOC.

Task 1.1 Project Administration

To ensure that project scope, budget, and schedule objectives are met, Contractor’s Project Manager shall provide:

* Quality control.
* Contract administration;
* WOC management, budget tracking;
* Coordination with Agency personnel;
* Attending required meetings and written minutes;
* Management of labor and sub-contractor resources;
* Monthly Progress reports;
* Development and maintenance of a Project filing system;
* Project Narrative; and
* Attending required meetings and providing written meeting minutes.

Task 1.1 Deliverables

Contractor shall provide:

* Monthly project progress reports that must include current status, unresolved issues, and major accomplishments during the month;
* Monthly invoices must include a breakdown of hours worked, by whom, and their title;
* Meeting minutes must include:
  + - Discussion summary;
    - Any written material on meeting room white board;
    - Decisions made; and
    - Next Steps.

Task 1.2 Coordination and Record Keeping

* Contractor shall contact Agency, other Contractors, and other agency staff to gather information on the project, project site, regulations and guidance, including:
* Direct communication via phone, email, post, office visits;
* Meeting attendance; and
* Arrange and attend joint field visits.
* Contractor shall prepare and maintain a file for the project

Task 1.2 Deliverables

* The project file must contain:
* Record of all contacts with Agency, other agency, and other Contractor staff;
* Summary of important information, decisions, and guidance received;
* Copies of meeting minutes; and
* Copies of all correspondence, including invoices and project progress reports.

Estimated Due Date: *(this can be in days from NTP or an actual date).*

Task 2 Prepare an Air Quality Analysis and Technical Memorandum

* 1. The memorandum must follow ODOT’s required format titled “*ODOT’s Air Quality Technical Memorandum Report Outline for Categorical Exclusion Projects in a Carbon Monoxide Non-attainment or Maintenance Area.*” The outline is provided in the attached EXHIBIT A. The memorandum will include model input summaries for the MOBILE6.2 emission factor model and the CAL3QHC CO dispersion model. In the technical memorandum, Contractor shall report the results of the dispersion modeling analysis using the single worst-case intersection affected by the project.
* Contractor shall determine the regulatory requirements to be satisfied by the air study. This includes NEPA, Transportation Conformity Rule and Indirect Source Construction permit requirements.
* Contractor shall collect all project information needed to conduct the study. This includes the project description, detailed mapping of the project showing lane configurations for the existing roadway and the build design, and the appropriate traffic data and traffic signal timing information needed to conduct the level of study.
* Contractor shall contact the \_\_\_\_\_\_\_\_\_\_\_\_ MPO to verify the exact status of the project in the most recent conforming RTP and TIP. Contractor shall verify with the MPO if the project is regionally significant or if the project is a Table 3 project of the Transportation Conformity Rule. If the project is regionally significant, contractor shall verify if the design concept and scope of the project is the same as what was used in the RTP/TIP regional emissions analysis conducted for air quality conformity. A discussion of the project status and results of the regional analysis shall be included in the memorandum report.

Contractor shall verify if the project is in the most recent STIP. If the project is located in a rural nonattainment or maintenance area (Grants Pass, Klamath Falls, Lakeview, La Grande or Oakridge), contractor shall contact ODOT’s air quality program coordinator (503-986-3485) to verify if the project is regionally significant and to verify if a regional air quality conformity determination is required or was conducted for the project.

* Traffic data will be obtained from the traffic engineer assigned to the project. Contractor shall review existing, no-build, and build traffic data to determine if intersections affected by the project will operate at LOS D, E, or F. If there are signalized intersections affected by the project that will operate at LOS D, E, or F, contractor shall model the worst case performing intersection. The MOBILE6.2 or most recent required and CAL3QHC models will be used.
* A local CO hot spot analysis will be performed for carbon monoxide for the worst case performing intersection for the following analysis years: year of project completion and the design year. The worst case intersection will be identified based on the worst level of service (LOS D, E, or F) and the highest traffic volumes expected under the Build Alternative. The results of the modeling will be compared to the State and National Ambient Air Quality Standards.
* Use the Environmental Protection Agency (EPA) model MOBILE6.2 to develop motor vehicle emission factors for the appropriate analysis years and vehicular speeds to be used in the dispersion modeling. The analysis years are: year of project completion and design year. Vehicular speeds should be the same as those identified in the respective traffic data. Model assumptions and input data will be consistent with the assumptions used in attainment planning or RTP/TIP conformity. This data should be obtained from the MPO responsible for RTP/TIP conformity.
* Use the EPA model CAL3QHC to predict local peak hour and average 8 hour CO concentrations at reasonable receptor and exposure sites. “Reasonable receptors” are determined by following EPA’s Guideline for Modeling Carbon Monoxide from Roadway Intersections. One-hour CO concentrations will be predicted based on peak hour traffic conditions. Eight-hour concentrations will be calculated using a persistence factor obtained from ODOT’s Air Quality Technical Manual. Predicted CO concentrations must be calculated and reported to the tenth of a part per million (example: 4.5 ppm). Predicted CO concentrations must be compared to the State and National Ambient Air Quality Standards (NAAQS).
* Contractor shall follow FHWA’s Interim Guidance on Air Toxic Analysis in NEPA documents dated February 3, 2006 or more recent guidance if available and deemed acceptable by Agency’s Air Quality Specialist. The document will include necessary information regarding air toxics for this level of project (Categorical Exclusion). If “no meaningful potential impacts” (as defined in the guidance) is determined, then the document should document the basis of this determination.
* Contractor shall incorporate appropriate report revisions into draft document as requested, and barring unforeseen circumstances, shall submit the final report within fourteen (14) days after receiving comments on the draft report.

Task 2 Conditions

* Before work begins, Contractor shall use the appropriate Persistence factors for the carbon monoxide analysis. The persistence factors can be obtained from Agency’s Air Quality Technical Manual.
* Contractor shall attend all necessary meetings.
* Contractor shall be available to answer questions from Agency.
  1. **Required only if the project is located in the EPA designated PM-10 non-attainment or maintenance areas of Medford/Ashland (AQMA), Grants Pass (UGB), or Klamath Falls (UGB)** **(CONTINGENCY TASK)**
* Contingency Task 1.2 consists of a Qualitative PM10 hot spot analysis. The PM-10 hot spot analysis should be conducted following FHWA’s guidance: “*”* The technical memorandum should include the findings of the qualitative PM10 hot spot analysis.

**Task 1.2 Deliverable:**

* The technical memorandum report should include the findings of the qualitative PM-10 hot spot analysis and state whether PM-10 impacts are expected to occur as a result of the project.
  1. **Required only if the project is located in Lane County, Oregon. (CONTINGENCY TASK)**
* Contingency Task 1.3 requires an Indirect Source Construction Permit (ISCP) determination, based on the LRAPA’s Rule for Indirect Sources (LRAPA Title 20 Section 20-100 through Section 20-135).

**Task 1.3 Deliverable:**

* The results of this task should be incorporated into the air quality technical memorandum report. The technical report should include a statement verifying if an Indirect Source Construction Permit is required for the project. If the permit is required, a statement to support this finding should also be included in the report.

#### Project Assumptions:

* A single intersection will be analyzed for CO impacts, unless analysis of the second intersection proposed as a contingent task is requested.
* Contractor will obtain traffic data from the traffic engineer assigned to the project. Contractor will obtain the project design and intersection configuration information from the design engineer assigned to the project.
* Three (3) hard copies of the Technical memorandum within \_\_\_\_\_ weeks of receiving Notice to Proceed, traffic data, and intersection configuration information. One copy of the draft should be sent to ODOT’s Air Quality Program Coordinator (355 Capitol St. NE Room 311, Salem, OR 97301) and the second/third copy to the Region Environmental coordinator/Environmental Project Manager.
* Three (3) hard copies of the Final Technical memorandum and one electronic copy within 2 weeks of receiving Agency’s comments on draft memorandum. One copy of the draft should be sent to ODOT’s Air Quality Program Coordinator (355 Capitol St. NE Room 311, Salem, OR 97301) and the second/third copy to the Region Environmental coordinator/Environmental Project Manager.
* A project documentation file must be provided to ODOT that must include all correspondence notes, raw data, models runs and project calculations. The file must include, traffic data and project design information used in the analysis, MOBILE 6.2 input and output files, and CAL3QHC input and output files. The documentation file should be submitted to ODOT’s Air Quality Program Coordinator.

If Agency determines that any deliverables are not acceptable and that any deficiencies are the responsibility of the Contractor, Agency shall prepare a detailed written description of any deficiencies and an associated time frame for correction, and deliver such notice to Contractor in a timely manner. Contractor shall correct any deficiencies within the time specified in the notice and at no cost to the Agency. If the corrective work causes any delays in Contractor’s Services, the Contractor shall submit a plan for regaining the delivery schedule for remaining Services under this WOC, unless otherwise allowed by Agency. If the identified deficiencies have not been corrected within the specified timeline, Agency may, (i) in accordance with the Terms and Conditions, Section 13, of the ATA, as incorporated into this WOC, terminate this WOC without payment or any further obligation or liability of any kind to Contractor; or (ii) require Contractor to continue to correct the deficiencies, reserving this same right to terminate at any time.

**TABLE 1—NON-CONTINGENCY TASK SUMMARY**

|  |  |  |  |
| --- | --- | --- | --- |
| Task Description | NTE for Each | Max Quantity | Total NTE Amount |
|  | $\_\_\_\_\_ | \_\_\_\_\_ | $\_\_\_\_\_\_ |

**CONTINGENCY TASK SUMMARY & COSTS**

***Table 1 is a summary of contingency tasks for the attached list of Projects that Agency, at its discretion, may authorize Contractor to produce. Details of the contingency tasks and associated deliverables are stated in the Task section of this SOW. Contractor shall complete only the specific task(s) identified and authorized via written (email acceptable) Notice-to-Proceed (NTP) issued by Agency’s CPM. If Agency chooses to authorize some or all of these tasks, Contractor shall complete the authorized tasks and deliverables per the schedule identified for each task. Payment for authorized contingency tasks is based on Time & Materials. The not-to-exceed (NTE) amount is identified for each task.***

***Each contingency task is only billable (up to the NTE amount identified for the task) if specifically authorized per NTP and after acceptance of Deliverables. The total amount for all contingency tasks authorized shall not exceed a maximum of $\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Each authorized contingency task must be billed as a separate line item on Contractor’s invoice.***

**Table #2—CONTINGENCY TASK SUMMARY**

|  |  |  |  |
| --- | --- | --- | --- |
| Contingency Task Description | NTE for Each | Max Quantity | Total NTE Amount |
| Task 1.2 PM-10 Hot Spot Analysis | $\_\_\_\_\_ | $\_\_\_\_\_ | $\_\_\_\_\_\_ |
| Task 1.3 Indirect Source Construction Permit Determination | $\_\_\_\_\_ | $\_\_\_\_\_ | $\_\_\_\_\_\_ |
|  | $\_\_\_\_\_ | $\_\_\_\_\_ | $\_\_\_\_\_\_ |
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|  | $\_\_\_\_\_ | $\_\_\_\_\_ | $\_\_\_\_\_\_ |
|  | $\_\_\_\_\_ | $\_\_\_\_\_ | $\_\_\_\_\_\_ |
| Total NTE For All Potential Contingency Tasks | | | $\_\_\_\_\_\_ |

The NTE amount (from Table 1) for non-contingency work (Task 1.1, Baseline Report) $\_\_\_\_\_\_\_\_\_\_

Total NTE amount for this WOC $\_\_\_\_\_\_\_\_\_\_

**TABLE #3—Acronyms and Definitions**

|  |  |
| --- | --- |
| Oregon Department of Transportation | ODOT |
| Lane Regional Air Pollution Authority | LRAPA |
| CO | Carbon monoxide |
| MOBILE6.2 | EPA’s Mobile Source Emission Factor Model |
| CAL3QHC |  |
| Environmental Protection Agency | EPA |
| PM-10 | Particulate Matter of 10 microns in diameter or less. |
| FHWA | Federal Highway Administration |
| AQMA | Air Quality Maintenance Area |
| UGB | Urban Growth Boundary |
| SKATS | Salem-Keizer Area Transportation Study |
| CBD | Central Business District |
| RTP | Regional Transportation Plan |
| TIP | Transportation Improvement Program |

**EXHIBIT A: ODOT’s Air Quality Technical Memorandum Report Outline**

**for Categorical Exclusion projects (in a CO nonattainment/maintenance area)**

Project Description (include figure identifying project location)   
Traffic Analysis

* Comparative discussion of peak hour traffic volumes, speeds, and LOS for each alternative.
* Identification of signalized intersections warranting CO hot-spot analysis with discussion of how intersections were selected.
  + Provide a table summarizing intersection LOS data for the appropriate study years for the No Build and all Build Alternatives.

Existing Air Quality

* Identify status of area with respect to NAAQS (e.g. nonattainment/maintenance for CO and identify its boundary, AQMA, etc.)

Local Air Pollutant Emissions Analysis: CO Hot-spots

* Methodology Discussion (MOBILE6.2, CAL3QHC, worst-case intersections)
  + Provide MOBILE 6.2 and CAL3QHC input assumptions
  + Provide Table identifying MOBILE 6.2 emission factors used for each speed and analysis year.
* Comparative discussion of CO concentrations, by intersection and alternative; (Report CO concentrations to the tenth part per million ex: 4.5 ppm)
* Provide a Table summarizing the results of the hot spot analysis for each intersection analyzed as follows:
  + Table Columns: Intersection name, alternative, analysis year, LOS, 1-hour CO concentration and 8-hour CO concentration (to the tenths of a ppm)
* Include Figures illustrating intersections analyzed in hot spot analysis. Figures should include existing and proposed lane configurations (or described clearly in narrative). Identify the prediction site location where the highest CO concentration is expected (in figure or in the narrative).
* Specifically identify all exceedances of the CO standard and non-conforming intersections.

Local Air Pollutant Emissions Analysis: PM-10 Qualitative Analysis (required only if project located in PM-10 area and is required for the project)

Air Pollutant Emissions: Air Toxics (per FHWA interim guidance) & Construction

Project Conformity with the State Implementation Plan

* State whether project is regionally significant or if it is a Table 3 project of the conformity Rule.
* Conformity Determination statement
  + Is the project in a conforming STIP/RTP/TIP (include dates of planning period)
  + Does the project create a new hot spot violation of the NAAQS?
  + Does the project increase the severity and frequency of an existing NAAQS violation?
  + Does the project delay timely attainment of Transportation Control Measures?

Indirect Source Construction Permit Requirements (only if project is located in Lane County)

* State whether an ISCP is required for the project and provide supporting data.

NOTE: The Project Documentation File should include all correspondence, MOBILE and CAL3QHC input files, output files, design information, and traffic data/