



Chemical Waste Management of the Northwest
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August 27, 2019

VIA U.S. MAIL & E-MAIL

Mr. J.R. Giska (giska.jonathan@deq.state.or.us)
Oregon Department of Environmental Quality
700 NE Multnomah St.
Suite 600
Portland, OR 97232-4100

RE: Cleaner Air Oregon EI Comment Letter August 8th, 2019.

Dear Mr. Giska:

Chemical Waste Management of the Northwest, Inc. (CWMNW) has received your Emission Inventory (EI) Comments letter dated August 8th, 2019. DEQ's request for completing the described actions and submittals within 120 days is neither attainable nor reasonable. In an effort to establish a more attainable and reasonable schedule CWMNW has carefully reviewed the deliverables required and has estimated to the best of its ability the time needed for completion each of these tasks. CWMNW summarizes below the major deliverables and our estimate of the dates for completion of these milestones:

| Cleaner Air Oregon Toxics Major Deliverable | Proposed Initial Submittal Date |
|--|--|
| ORU-2 TOU Source Test Protocol Subission | 12/11/2019 |
| Revised Emissions Inventory Less ORU-2 TOU Emissions | 12/06/2019 |
| ORU-2 TOU Modifications | 06/19/2020 |
| Source Test and Report Completion and Submittal | 09/18/2020 |
| Final Emissions Inventory Including ORU-2 TOU | 10/09/2020 |

Notwithstanding the fact that Department's request for source testing falls outside of the facility's Air Permit requirements, the Department's requirement to complete these tasks by December 9th is not reasonable in light of the numerous elements that must be completed and the time necessary to complete them. These elements generally include design, obtaining building permits, and construction, which will easily push the completion date for this project well beyond the December 2019 deadline. Therefore, consistent with OAR 340-245-0030(3), CWMNW requests an extension so as to ensure that the most accurate data is used in our risk assessment. As the summary schedule above demonstrates, we are working diligently towards completing the submittal. The additional time will have a substantive impact on the outcomes of the submittal and will ensure a significantly more accurate end product.

The following tables and summary discussion explain how we determined the elements and timing for each task and sub-task:

ORU-2 TOU Source Test Protocol Subissions

As the Department is aware, CWMNW constructed the ORU-2 process and system in compliance with the facility's Air and RCRA Permits. The Thermal Oxidizer (TOU) has not been designed or constructed with a stack height suitable for testing, lacks testing ports, and safe access to them. CWMNW discussed these issues with DEQ during our April 18, 2019 site meeting and tour. Completion of a proper source test protocol is dependent on the design of the physical features of the stack, CWMNW has been working since inception with several source test contractors to identify the proper design of the system to be tested.

CWMNW estimates the following timetable for completing the Source Test Protocol phase of this project:

| Task Name | Duration | Start | Finish |
|---------------------------------------|----------------|--------------------|---------------------|
| ORU-2 TOU Source Test Protocol | 78 days | Mon 8/26/19 | Wed 12/11/19 |
| Procurement | 1 week | Mon 8/26/19 | Fri 8/30/19 |
| Contractor Site Visit | 2 days | Tue 9/10/19 | Wed 9/11/19 |
| Source Test Protocol Development | 4 weeks | Thu 9/12/19 | Wed 10/9/19 |
| CWMNW Review | 2 weeks | Thu 10/10/19 | Wed 10/23/19 |
| SCS Revisions and Submittal | 1 week | Thu 10/24/19 | Wed 10/30/19 |
| Agency Review | 2 weeks | Thu 10/31/19 | Wed 11/13/19 |
| CWMNW Resubmittal | 3 weeks | Thu 11/14/19 | Wed 12/4/19 |
| Agency Approval | 1 week | Thu 12/5/19 | Wed 12/11/19 |

Our source test contractor will require a site visit to review the process and the TOU to develop the protocol and standards for CWMNW to implement so the source testing can be completed properly. Once the site visit has been completed the contractor requires four weeks to develop the written testing protocol for draft submission to SCS Engineers and CWMNW for review. We have included two weeks for review of the draft document along with one additional week for the contractor to make the requested revisions. We have allowed two weeks for agency review and resubmittal to CWMNW for revisions. CWMNW has allowed three weeks for revisions and subsequent resubmittal. We are estimating one week for Department review and approval. We consider this schedule for developing the source test protocol to be moderately aggressive given the number and complexity of the tests to be performed.

Revised Emissions Inventory (Not Including ORU-2 TOU Emissions Update)

The following table summarizes the estimated schedule for the completion of the site wide emissions inventory excluding the ORU-2 emissions inventory update:

| Task Name | Duration | Start | Finish |
|--|-----------------|-------------------|--------------------|
| Emissions Inventory Update | 200 days | Mon 3/4/19 | Fri 12/6/19 |
| CAO Inventory Request Received | 0 days | Mon 3/4/19 | Mon 3/4/19 |
| Pond Inventory Completed | 64 days | Mon 3/18/19 | Thu 6/13/19 |
| Stabilization/Solidification Emissions Inventory | 200 days | Mon 3/4/19 | Fri 12/6/19 |
| Landfill Emissions Inventory | 195 days | Mon 3/4/19 | Fri 11/29/19 |
| Materials Movement Emissions Inventory | 184 days | Tue 3/5/19 | Fri 11/15/19 |
| Macro Emissions Inventory | 189 days | Tue 3/5/19 | Fri 11/22/19 |
| Drum Handling Emissions Inventory | 189 days | Tue 3/5/19 | Fri 11/22/19 |
| Inventory Update | 2 weeks | Fri 11/22/19 | Fri 12/6/19 |

As the Department is aware, CWMNW accepts on a daily basis all types of hazardous and non-hazardous wastes, each with widely varying contaminant types, concentrations, volumes, and mixtures. As discussed in previous submissions and discussions, CWMNW provided emission estimates based on a maximum potential-to-emit and emission factors contained in the facility's Air Permit in our initial May 31st, 2019 emissions inventory submittal.

To prepare an updated inventory, CWMNW must base its estimated on historical waste receipts using average concentrations of each contaminant reported by generator contained in the laboratory data where supplied. This is a monumental task that is unlike the efforts needed by any other source in the Cleaner Air Oregon program.

ORU-2 TOU Modifications

The detailed summary of each task associated with the deliverable of modifying the ORU-2 TOU unit to be safely and accurately tested is shown below:

| Task Name | Duration | Start | Finish |
|--|-----------------|--------------------|--------------------|
| ORU-2 TOU Stack Modifications | 215 days | Mon 8/26/19 | Fri 6/19/20 |
| Procurement | 1 week | Mon 8/26/19 | Fri 8/30/19 |
| Field Measurement | 1 week | Mon 9/2/19 | Fri 9/6/19 |
| Stack/Catwalk Design and Engineering Drawings | 8 weeks | Mon 9/9/19 | Fri 11/1/19 |
| Stack and Catwalk Fabrication | 5 weeks | Mon 11/4/19 | Fri 12/6/19 |
| Shipment from Virginia | 1 week | Mon 12/9/19 | Fri 12/13/19 |
| Gilliam County Building Permit (statutory timeframe) | 150 days | Mon 11/4/19 | Fri 5/29/20 |
| Unit install | 3 weeks | Mon 6/1/20 | Fri 6/19/20 |

As the Department is aware, our agreement to source test the ORU-2 TOU unit is not required under the facility's Air Permit and is intended only to address concerns raised in the spurious and exaggerated claims brought forth by a direct competitor in Texas. CWMNW constructed and operates the ORU-2 process in full compliance with the facility's Air Permit.

To achieve an acceptable source test on the TOU unit, the current rain cap feature must be removed and an additional 108" of stack must be added to allow for the inclusion of test ports and minimization of downstream disturbances. The current unit is not designed to support the additional weight of the increased stack height and the seismic-resisting conditions required by code. To accommodate the stack extension, a combination catwalk and stack support structure must be installed. CWMNW is in process of contracting all the required contractors to accomplish these modifications. Construction at a hazardous waste can be very complicated and requires great care and caution.

The steps in completing the stack upgrade include a one-week period for field measurements in support of the engineering design. The TOU is located inside a concrete hazardous waste containment area that was not designed to support the additional loads required by this upgrade. Changes to the containment structure would require a RCRA permit to accomplish (18-month process), and the design of the supports will require avoiding changes to the existing containment structure.

Our contract engineer estimates the design and construction drawings portion of the project will require a minimum of eight weeks to complete. CWMNW will submit for the required building permit to install the upgrades, once the engineering package and construction drawings are complete. This task includes the statutory 150-day building permit review period for Gilliam County. It should be noted that Gilliam County previously required an approximate seven-month review period for the original building permit.

Once the building permit is issued, our erection and construction contractor has estimated three weeks for installation.

Source Test and Report Completion

The detail of each task associated with the source test and report deliverable is shown below:

| Task Name | Duration | Start | Finish |
|---|-----------------|---------------------|--------------------|
| ORU-2 TOU Source Test and Report | 202 days | Wed 12/11/19 | Fri 9/18/20 |
| Protocol Complete | 0 days | Wed 12/11/19 | Wed 12/11/19 |
| TOU Construction Complete | 0 days | Fri 6/19/20 | Fri 6/19/20 |
| Test Contractor Schedule and Mob | 1 week | Mon 6/22/20 | Fri 6/26/20 |
| Perform Source testing | 1 week | Mon 6/29/20 | Fri 7/3/20 |
| Test Report Draft | 8 weeks | Mon 7/6/20 | Fri 8/28/20 |
| CWMNW Review | 2 weeks | Mon 8/31/20 | Fri 9/11/20 |
| Report complete | 1 week | Mon 9/14/20 | Fri 9/18/20 |

Once the TOU stack upgrade is completed, we have estimated one week for the source testing contractor to mobilize and setup. CWMNW has estimated one week for the contractor to complete the testing and an additional eight weeks for the contractor to receive the laboratory reports and complete the draft report for CWMNW review. Note that unlike more conventional stack testing methods, the testing methods required for the Cleaner Air Oregon emissions inventory are specialized and take additional time by the analytical laboratory. We are estimating another week for revisions and report completion.

Final Emissions Inventory Including ORU-2 TOU Emissions

The detail of each task associated with the deliverable of completing the emissions inventory in light of the testing data is shown below;

| Task Name | Duration | Start | Finish |
|---|-----------------|-------------------|--------------------|
| Final ORU-2 Emissions Inventory Update | 420 days | Mon 3/4/19 | Fri 10/9/20 |
| Profile Concentrations Development | 150 days | Mon 3/4/19 | Fri 9/27/19 |
| Source Test Complete | 0 days | Fri 9/18/20 | Fri 9/18/20 |
| Emissions Calculations | 2 weeks | Mon 9/21/20 | Fri 10/2/20 |
| Inventory Update | 1 week | Mon 10/5/20 | Fri 10/9/20 |

Once the source test has been successfully completed, CWMNW is estimating a total of three weeks for completing the emissions calculations and providing an inventory update to the Department. Consistent with OAR 340-245-0030(2), CWMNW will submit the Risk Assessment and Modeling Protocols to the Department once the facilities emissions inventory is approved. We note that we would not have the information necessary to complete those documents until the testing is complete and the inventory approved.

CWMNW has provided a realistic estimate of the expected date for each deliverable; however, many factors could cause either delay or acceleration of the estimated time frames. If reasonable and safe, CWMNW will work to expedite these tasks. However, the safety of our employees, contractors and the environment is paramount and, on a unique site such as ours, results in the need for additional time. CWMNW will always take the time to be safe and we trust that DEQ would not rush any steps such that people's wellbeing could be jeopardized.

August 27, 2019

Should you have any questions or wish to meet to discuss the proposed time frames, please feel free to contact me by phone at (602) 757-3352 or by email at jdenson@wm.com.

Sincerely,

A handwritten signature in black ink, consisting of a large, sweeping loop at the top, a vertical line descending from the center, and a horizontal line at the bottom with a small flourish on the left side.

James L. Denson Jr.
PNW/BC Area Environmental Protection Manager

CC;

Tom Wood, Stoel Rives by E-mail
Facility Operating Record

Attachment