# Highly Reactive Volatile Organic Compound Emissions Cap and Trade (HECT) Annual Compliance Reports

### **Supporting Documentation Checklist for Cooling Towers**

The following checklist was developed to help owners/operators of sites that are subject to the HECT Program to prepare and submit supporting documentation for Annual Compliance Reporting per 30 Texas Administrative Code (TAC) §101.400.

Annual Reports must be submitted through the <u>State of Texas Environmental Electronic Reporting System</u> (<u>STEERS</u>) by March 31<sup>st</sup> following each control period. Please attach a completed copy of this checklist, along with the appropriate supporting documentation, to your STEERS report submission. **Incomplete or missing documentation will delay processing of your report.** 

This checklist is not a compliance substitute for the rule requirements in 30 TAC Chapter 115 and only reflects the documentation used by the Emission Banking and Trading Team to process annual compliance reports. The official version of the Chapter 115 rules is available on the <u>Secretary of State</u> website.

#### **Notes**

- Emissions for each HECT facility must be quantified using appropriate Chapter 115 monitoring and testing methods. If the required Chapter 115 data is missing or unavailable, you must provide an alternate method, in accordance with 30 TAC §101.396(c) as well as a detailed description of the reason the alternate data is being used.
- Data substitution provided for continuous monitoring systems (CMS) downtime should be listed in accordance with Chapter 115 procedures and should not be listed as §101.396(c).
- If alternate data is used due to noncompliance with Chapter 115 protocols, an additional 10% quantification penalty will be applied in accordance with §101.396(c)(2) for the period of noncompliance.

#### Instructions

- 1. This document contains multiple checklist tables. Each checklist is associated to a Chapter 115 monitoring or testing citation. Complete the appropriate checklists for the units at your site. **Only fill out the checklists for citations relevant to your report.**
- 2. In the first row of each applicable checklist, identify which unit(s), by Emission Point Number (EPN) are reporting using that citation.
- 3. Use the checklist to identify the supporting documentation required with your Annual Compliance Report. Check off each item attached to your report.

## **HECT Supporting Documentation Checklist for Cooling Towers**

| Complete at least <b>two</b> citation checklists for the cooling towers at your site. Include which EPNs are reporting in the first row of each applicable checklist table. |                             |  |  |  |
|---|-----------------------------|--|--|--|
| _   |                             | .764(a)(1): Cooling tower with a design capacity to circulate ≥ 8,000 gallons per minute (gpm) ng water:   |  |  |
| EPN   | ls:                         |  |  |  |
| Attac   | hed                         | Documentation Required   |  |  |
|   | ]                           | Speciated HRVOC emissions (ton per year, tpy) for each cooling tower (isomers of butene may be reported collectively)  |  |  |
|   | ]                           | Design capacity circulation rate (gpm) for each cooling tower  |  |  |
|   | ]                           | Brief written description of the methodology used to determine the reported HRVOC emissions for each EPN   |  |  |
|   | ]                           | HECT CMS Certification form  |  |  |
| S115.764(a)(2), (4), (5): Cooling tower with a design capacity to circulate ≥ 8,000 gpm cooling water:  |                             |  |  |  |
| EPN   | ls:                         |  |  |  |
| Attac   | hed                         | Documentation Required   |  |  |
|   | ]                           | HECT CMS Certification form  |  |  |
|   |                             |  |  |  |
|   | ]                           | HECT Accredited Laboratory Certification form for laboratory analyses of samples   |  |  |
|   | 115.                        | HECT Accredited Laboratory Certification form for laboratory analyses of samples  764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:   |  |  |
| □ §   | ı                           |  |  |  |
| EPN   | ls:                         |  |  |  |
| EPN   | ls:                         | 764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:   |  |  |
| EPN Attac   | ls:<br>hed<br>115.          | 764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:  Documentation Required   |  |  |
| EPN Attac   | hed<br>hed<br>115.          | 764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:  Documentation Required  HECT CMS Certification form  764(b)(1): Cooling tower with a design capacity to circulate <8,000 gpm cooling water or in   |  |  |
| EPN Attac   | hed<br>hed<br>115.<br>ledic | 764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:  Documentation Required  HECT CMS Certification form  764(b)(1): Cooling tower with a design capacity to circulate <8,000 gpm cooling water or in   |  |  |
| EPN Attac   | hed<br>hed<br>115.<br>ledic | 764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:    Documentation Required   |  |  |
| EPN Attac   | hed<br>hed<br>115.<br>ledic | 764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:  Documentation Required  HECT CMS Certification form  764(b)(1): Cooling tower with a design capacity to circulate <8,000 gpm cooling water or in eated service to a jacketed reactor:  Documentation Required  Speciated HRVOC emissions (tpy) for each vent (isomers of butene may be reported collectively)  Design capacity circulation rate (gpm) for each cooling tower |  |  |
| EPN Attac   | hed<br>hed<br>115.<br>ledic | 764(a)(6): Cooling tower with a design capacity to circulate ≥8,000 gpm cooling water:  Documentation Required  HECT CMS Certification form  764(b)(1): Cooling tower with a design capacity to circulate <8,000 gpm cooling water or in cated service to a jacketed reactor:  Documentation Required  Speciated HRVOC emissions (tpy) for each vent (isomers of butene may be reported collectively)  |  |  |

## **HECT Supporting Documentation Checklist for Cooling Towers**

| §115.764(b)(2), (4), (5): Cooling tower with a design capacity to circulate <8,000 gpm cooling water or in dedicated service to a jacketed reactor: |  |  |  |  |
|---|--|--|--|--|
| EPNs:   |  |  |  |  |
| Attached  | Documentation Required   |  |  |  |
|   | HECT Accredited Laboratory Certification form for laboratory analyses of samples   |  |  |  |
| §115.764(b)(6): Cooling tower with a design capacity to circulate <8,000 gpm cooling water or in<br>dedicated service to a jacketed reactor:        |  |  |  |  |
| EPNs:   |  |  |  |  |
| Attached  | Documentation Required   |  |  |  |
|   | HECT CMS Certification form  |  |  |  |
|   | HECT Accredited Laboratory Certification form for laboratory analyses of samples   |  |  |  |
| §115.764(e)(1): Cooling tower not using an option in §115.764(a)(1), (b)(1), or (e)(2):   |  |  |  |  |
| EPNs:   |  |  |  |  |
| Attached  | Documentation Required   |  |  |  |
|   | Speciated HRVOC emissions (tpy) for each vent (isomers of butene may be reported collectively)   |  |  |  |
|   | Design capacity circulation rate (gpm) for each cooling tower  |  |  |  |
|   | Brief written description of the methodology used to determine the reported HRVOC emissions for each EPN   |  |  |  |
|   | Certified pump performance information from manufacturer or a qualified independent third-party organization showing maximum potential flow rate   |  |  |  |
| §115.764(e)(2): Cooling tower not using an option in §115.764(a)(1), (b)(1), or (e)(2):   |  |  |  |  |
| EPNs:   |  |  |  |  |
| Attached  | Documentation Required   |  |  |  |
|   | Speciated HRVOC emissions (tpy) for each vent (isomers of butene may be reported collectively)   |  |  |  |
|   | Design capacity circulation rate (gpm) for each cooling tower  |  |  |  |
|   | Brief written description of the methodology used to determine the reported HRVOC emissions for each EPN, including description of the methodology used to determine cooling water flow rate |  |  |  |
|   | Certified pump performance information from manufacturer or a qualified independent third-party organization showing maximum potential flow rate   |  |  |  |

## **HECT Supporting Documentation Checklist for Cooling Towers**

| §115.764(f): Alternative monitoring approved by the executive director  |   |  |  |
|---|---|--|--|
| EPNs:   |   |  |  |
| Attached  | Documentation Required  |  |  |
|   | Speciated HRVOC emissions (tpy) for each vent (isomers of butene may be reported collectively)  |  |  |
|   | Design capacity circulation rate (gpm) for each cooling tower   |  |  |
|   | Brief written description of the methodology used to determine the reported HRVOC emissions for each EPN  |  |  |
|   | Summary of the alternative monitoring procedure   |  |  |
|   | Documentation of Texas Commission on Environmental Quality (TCEQ) approval of alternate monitoring or testing procedure   |  |  |
| §115.764(h)(1): Cooling tower with a design capacity to circulate ≥ 8,000 gpm cooling water and in dedicated service to finite volume system (e.g., propylene refrigeration system):    |   |  |  |
| EPNs:   |   |  |  |
| Attached  | Documentation Required  |  |  |
|   | Speciated HRVOC emissions (tpy) for each vent (isomers of butene may be reported collectively)  |  |  |
|   | Design capacity circulation rate (gpm) for each cooling tower   |  |  |
|   | Brief written description of the methodology used to determine the reported HRVOC emissions for each EPN  |  |  |
|   | HECT CMS Certification form   |  |  |
| §115.764(h)(2)-(7): Cooling tower with a design capacity to circulate ≥ 8,000 gpm cooling water and in dedicated service to finite volume system (e.g., propylene refrigeration system) |   |  |  |
| EPNs:   |   |  |  |
| Attached  | Documentation Required  |  |  |
|   | HECT Accredited Laboratory Certification form for laboratory analyses of samples  |  |  |
| §101.396(c): Alternate Data   |   |  |  |
| EPNs:   |   |  |  |
| Attached  | Documentation Required  |  |  |
|   | Justification for not using the methods above, and the justification for the method used.  Note: Emissions quantified under this protocol are subject to a 10% quantification penalty |  |  |