

Austin City Code 6-4-10, *Water Use Management, Facilities Regulated* requires all properties with cooling towers to register them with Austin Water.

REGISTRATION DUE DATES

- New cooling towers must be registered with Austin Water before operation

EFFICIENCY STANDARDS

- All cooling towers installed **after December 31, 2007** that use Austin Water potable water must have all of the following:
 - Make-up and blow down sub-meters;
 - A conductivity controller;
 - A drift eliminator with a drift rate of not more than 0.005% of the circulated water flow rate for crossflow towers and 0.002% for counter flow towers;
 - An overflow alarm; and
 - Achieve at least 5 cycles of concentration.
- **New facilities** (*building permit application submitted after September 5, 2017*) with cooling towers of **100 tons or greater combined cooling tower capacity** must meet the following requirements:
 - Must have the make-up and blow down meters and overflow alarm connected to the building's Central Energy Management System or Utility Monitoring Dashboard; and
 - The facility must either:
 - Have a water storage tank, plumbing and treatment system to either use blow down water for wash down, cleaning, toilet flushing, subsurface irrigation, and other authorized purposes; or
 - Offset a minimum of 10% of the makeup water with reclaimed or onsite alternative water sources.
- **Water Efficiency Upgrade Rebates**
 - Austin Water will review all completed and submitted registration forms to help identify potential water-saving upgrades and eligibility for available rebates
 - Equipment and systems required by city code are not eligible for rebates
 - Up to \$100,000 per eligible upgrade project is available through [Bucks for Business](#)

CHECKLIST

- Complete a registration form for the cooling tower. A separate registration form should be completed and submitted for each cooling tower. *Incomplete forms will not be accepted by Austin Water.*
- Complete the Cycles of Concentration worksheet for the cooling tower **no more than 90 days prior to registration**. A separate worksheet should be completed and submitted for each cooling tower.
- If there is more than one cooling tower at the facility, please include a site plan showing each tower's location, with each tower identified by using the cooling tower's serial number or another method.

COOLING TOWER EFFICIENCY PROGRAM

- Submit all completed registration form(s) and site plan (*if applicable*) to:
 - Mail:** Austin Water Conservation, PO Box 1088, Austin, TX 78767
 - Email:** FacEvalSubmit@austintexas.gov
 - Fax:** 512-974-3504

- Austin Water will review all submitted information and contact customers about possible water efficient upgrades and available rebates

COOLING TOWER EFFICIENCY – REGISTRATION FORM

CUSTOMER INFORMATION

Austin Water Account #: _____ Backflow Serial #: _____

Company Name: _____

Tower Site Name:
(Ex: North Tower or Store #53) _____

Property Address: _____

City: _____ State: _____ Zip: _____

Mailing Address:
(if different) _____

City: _____ State: _____ Zip: _____

Contact Name: _____ Title: _____

Phone: _____ Email: _____

COOLING TOWER INFORMATION

Date Completed: _____

Cooling Tower:	Make & Model: _____ Size (tons): _____ Date Installed: _____ Water Source(s): _____ Cycles of Concentration: Complete & Submit the Cycles Of Concentration Worksheet (page 4)
Make & Model of the Following:	Conductivity Controller: _____ Drift Eliminator: _____ Overflow Alarm: _____
Make-Up Meter:	Model Number: _____ Serial Number: _____
Blow Down Meter:	Model Number: _____ Serial Number: _____

Yes No Are the makeup / overflow meters, as well as the overflow alarm, connected to the building's central energy management system or utility monitoring dashboard?

Yes No Is the cooling tower blowdown reused for on-site beneficial use?

COOLING TOWER EFFICIENCY PROGRAM – REGISTRATION FORM

Yes No Is any makeup water supplied by reclaimed or an on-site auxiliary water source?

Yes No Does the owner maintain an on-site log that contains the monthly make-up and blow down meter reads, conductivity values, and cycles of concentration?

Yes No Is a biocide used to treat the cooling system recirculation?

Yes No Have the cooling tower(s) been registered with Austin Water on a form provided by Austin Water?

CYCLES OF CONCENTRATION

The worksheet helps cooling tower owners with setting, calculating, and recording the cycles of concentration at their cooling towers.

1) In the past 12 months, what were the lowest cycles of concentration recorded? Please include the date when the readings were taken.

2) In the past 12 months, what was the average cycle of concentration?

3) Complete the table below and submit it with your Registration and/or Inspection Form (*fill out a separate table for each cooling tower*)

- For “Austin Water Potable Water”, use the most recent [Water Quality Summary Report](#) to calculate the average of “DWTP Tap”, “UWTP Tap”, and “WTP4 Tap” for each constituent
- For “Cooling Tower”, enter the water quality analysis of the circulating water in the cooling tower and blow down set points for your cooling tower
- To calculate “Cycles of Concentration”, divide the cooling tower hardness and conductivity by Austin Water’s hardness and conductivity

	Phenol Alkalinity	Total Alkalinity	Total Hardness	Calcium	Conductivity (umohos/cm)	pH	Inhibitor	Langelier Saturation Index (LSI)
Austin Water Potable Water								
Cooling Tower								
Cycles of Concentration								

COOLING TOWER EFFICIENCY PROGRAM – REGISTRATION FORM

WATER TREATMENT

4) Indicate the type of water treatment used for the cooling tower:

- STANDARD TREATMENT** – *Uses biocides, anti-corrosion treatment, and scaling inhibitors*
 - PH TRIMMING** – *Uses sulfuric acid (H₂SO₄) to keep pH/alkalinity below 8.6 and minimize scale*
 - WATER SOFTENING** – *Uses water treatment and/or filtration systems to reduce hardness (e.g., TDS, calcium carbonate)*
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CUSTOMER STATEMENT

I certify that all statements and representations contained in this form are true, correct and complete.

Printed Name: _____ Title: _____
Cooling Tower Owner / Authorized Representative

Signature: _____ Date: _____

RETURN FORMS TO AUSTIN WATER

Mail: Austin Water Conservation, PO Box 1088, Austin, TX 78767

Email: FacEvalSubmit@austintexas.gov

Fax: 512-974-3504