

Development Services Department
Building Safety Division

OFFICE PROCEDURE DIRECTIVE #59

SUBJECT: WATER CONSERVATION REPORT

As a result of an agreement reached between the City of Tempe and the Arizona Department of Water Resources (Stipulation and Consent Order #CDH-89-186), the City Council adopted Ordinance #92.27 requiring that a Water Conservation Report be completed and submitted before a building permit is issued for new non-residential buildings and for additions, alterations or repairs exceeding 50% of the value of an existing non-residential building within any 12 month period.

The ordinance is applicable to all such permits applied for on or after October 11, 1992.

Excluded from this requirement are:

- 1) Residential buildings including apartments, condominiums, townhouses and single family dwellings, but not including hotels, motels, etc.
- 2) Park buildings and structures.
- 3) Temporary construction buildings or structures.

The Water Conservation Report shall be signed by an Arizona registered architect or engineer and shall be submitted to the Development Services Department/Building Safety Division prior to the issuance of the building permit.

The Plan Checker will print a copy of the "Request for Water Conservation Report." It will be included with the plan check report and returned to the applicant upon completion of the IPC (initial plan check).

Attached as Exhibit B and C are examples of a typical Water Conservation Report. These are to be included with the "Request for Water Conservation Report." The permit hold is released upon our receipt of the report signed by an Arizona registered architect or engineer. This report is then forwarded to Water/Wastewater for filing. The Plan Checker will note on the back of the Plan Check Progress Report when the report was received and the date sent to Water/Wastewater. Building Safety will not maintain copies of this report.

CITY OF TEMPE CONSERVATION ANALYSIS REPORT

.....(name of company) is implementing the following water conservation measures at(location of facility):

1. ~~PROCESS RELATED WATER CONSERVATION:~~

2. COOLING:

3. DOMESTIC WATER USE:

4. LANDSCAPE:

CERTIFICATION

I,....., certify that I am an Architect/Engineer registered in the State of Arizona, and that the water conservation measures implemented by use the best available technology consistent with reasonable economic return.

Seal

CITY OF TEMPE CONSERVATION ANALYSIS REPORT

A.N. OTHER INC.,.....(name of company) is implementing the following water conservation measures at 123 N. EAST STREET. TEMPE, 85281..... (location of facility).

1. PROCESS-RELATED WATER CONSERVATION: (EXAMPLES)

- a. Flow monitoring and control - installation of water meters on individual pieces of water-using equipment can show how water efficient a process is.
b. Reuse or recycling of water within a process or in a different process.
c. Reduce the reject rate for the reverse osmosis units. Reuse the reject water in other process. (Note: Assess the quality of the water before reuse).
d. Implement a leak detection and repair program.

2. LANDSCAPE: (EXAMPLE)

Total landscaped area q sq. ft.
Percent low water use landscape q/2 sq. ft.
Percent high water use landscape q/2 sq. ft.

where q = area

Types of irrigation systems: Irrigation system zoned by vegetation type - sprinklers for turfgrass, drip/bubblers for shrubs and groundcover, bubbler for trees.

Scheduling: All irrigation, except maintenance checks, is done at night. Turf is irrigated using ET scheduling.

Other equipment: Soil moisture sensors, rain shut-off, and excessive flow shut-off installed to prevent unnecessary watering or to stop watering in the event of a system break.

Types of plants used (drought tolerant), mulches eg. decomposed granite, water harvesting

3. CONSERVATION OF COOLING WATER: (EXAMPLES)

Cooling Towers: - cooling towers should achieve a minimum total dissolved solids in the tower blow down of 2000 ppm.

Blow down water may be re-used to irrigate landscape.

Elimination of blowdown flow from cooling towers by changing to ozonation.

Evaporative coolers: Recirculation pumps and reduction in bleed-off. Bleed-off water can be used to irrigate landscape.

Avoid single-pass methods to cool equipment. Where possible reuse the water for irrigation or other cooling purposes.

4. DOMESTIC WATER CONSERVATION: (EXAMPLES)

Installation of the following type of equipment (per City of Tempe Building Code):

Toilets, (gallons per flush)	1.6
Urinals, "	1.5
Lavatory faucets, (gallons per minute)	3.0
Shower Heads, "	3.0

5. EMPLOYEE EDUCATION: (EXAMPLES)

- o Employee Awareness program.
- o Bulletins, newsletters, and paycheck stuffers.
- o Distribution of water conservation literature.
- o Displaying water conservation posters.

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