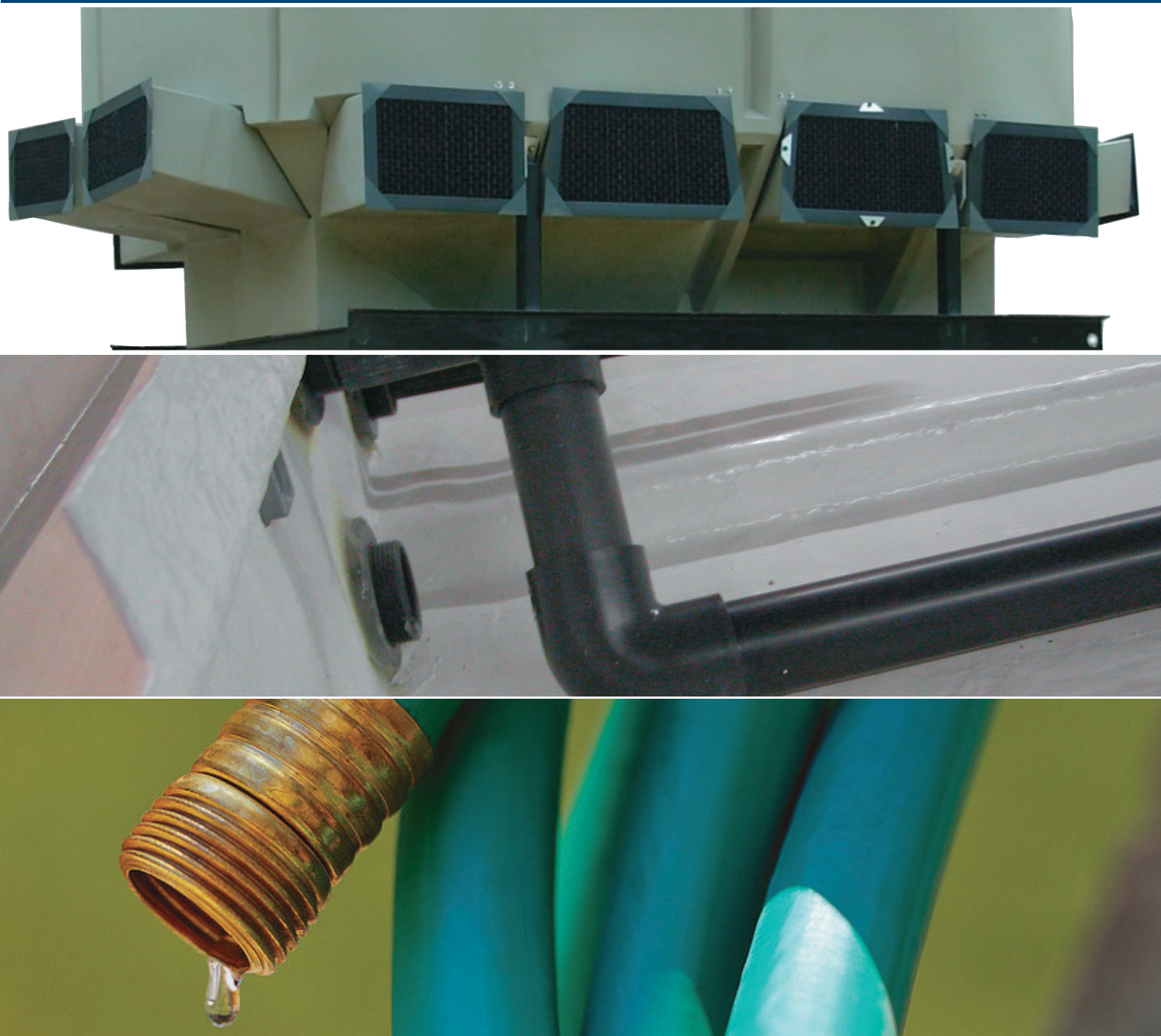


GUIDELINES FOR DISCHARGE OF COOLING TOWER WATER TO SEWER

REVISED



HUNTER WATER CORPORATION OFFICES

HEAD OFFICE

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Newcastle West 2302**

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24hr Emergency Only: 1300 657 000

DISTRICT OFFICES

Maitland Customer Centre

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MAITLAND NSW 2320
PO Box 55
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Lake Macquarie Customer Centre

**Lake Macquarie City Council Chambers
Main Road
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BOOLAROO NSW 2284
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POLICY

This policy sets out the conditions of approval under which owners/operators of water cooled air conditioners may discharge to the Corporation's sewer.

AIM

To minimise the impact on the Corporation's sewer and to protect the Corporation's personnel or works from the discharge of cooling tower wastewater that may contain unacceptable levels of contaminants or, in some cases, large volumes of treated water.

OBJECTIVES

To provide a standardised procedure which outlines correct disposal methods and requirements when discharging cooling tower wastewater to a sewer of the Corporation.

PERMIT TO DISCHARGE WASTEWATER TO SEWER

It is a requirement of Hunter Water Corporation to obtain a Trade Waste Agreement to discharge wastewater from cooling towers to sewer. The application for an agreement can be obtained at any of the Corporations offices. An agreement fee is applicable, the cost of which is outlined in the current Trade Waste Policy and determined by the Corporation annually.

TRADE WASTE PRE-TREATMENT REQUIREMENTS

It is a requirement of Hunter Water Corporation that a suitably sized silt arrestor be installed on all new installations or on building undergoing major refurbishment.

The silt arrestor is sized as follow:-

- | | |
|--------------------------------|----------------------|
| 1. Up to 1000 litre discharge | 200 litre capacity |
| 2. 1000 - 3000 litre discharge | 500 litre capacity |
| 3. 3000 – 6000 litre discharge | 1,000 litre capacity |

On all existing buildings where the installation of a pre-treatment facility is impractical, direct discharge to sewer may be approved on condition that wastewater quality is achieved. This will be determined by the Corporation.

Note: If the wastewater quality cannot be achieved then arrangements are to be made subject to local Council approval.

WATER QUALITY

Prior to the discharge of wastewater to sewer, a sample of the discharge must be submitted to a registered laboratory for analysis at the owners/operators expense.

The analysis must show that the discharge of wastewater to sewer complies with the Corporations Trade Waste Policy for pH, copper, chromium and non-filterable residue.

i.e.	pH	=	6.5 to not greater than 10
	Cu	=	2mg/L
	Cr	=	2mg/L
	NFR	=	500mg/L

This data must be submitted to Hunter Water Corporation for approval prior to the wastewater discharge to sewer. This condition also applies when cleaning/treatment has been carried out on the cooling tower and discharge of wastewater to sewer is proposed.

DISCHARGE RATES/VOLUME

It is a requirement of Hunter Water Corporation that the applicant nominate the proposed wastewater discharge volume in the Trade Waste Agreement application. Hunter Water reserves the right to control the wastewater discharge flow rate to minimise impact on the Corporation's sewer system.

CLEANING FREQUENCY

On all new and existing silt arrestors/pre-treatment facilities installed for the purposes of retaining residual material, cleaning shall be carried out at no less than three monthly intervals. All residual waste shall be disposed of in an approved manner, i.e. landfill or DECC requirements.

A record of the disposal method shall be by docket system indicating the date the facility was cleaned, by whom, the quantity and the destination of the material.

CONNECTION OF SEWER

The discharge pipe from all cooling tower shall be connected to a trap suitability arranged to allow access for sampling. It is preferred that the sampling point be within 2 metres of the cooling tower for easy identification (see figure 1).

EMERGENCY PROCEDURES

In some instances it may be necessary to discharge large volumes of treated cooling tower water to sewer if it is suspected to contain legionnaire's bacteria.

Approval to discharge is required by this corporation so that maintenance personnel, as well as Wastewater Treatment personnel are notified of possible health risks associated with the discharge of contaminated cooling tower water. The Corporation shall be notified immediately by contacting the Contact Centre on 1300 657 657

Figure 1

