Bushfire and roof-harvested rainwater

Fact sheet

Many people in Queensland do not have access to town water supplies and may rely on roof-harvested rainwater as their sole supply of drinking water. Some of these people may also live in areas that experience bushfires.

Bushfires produce large amounts of smoke, ash and debris that can settle on roofs used to collect rainwater. Fire retardants and foaming agents used in fire-fighting activities may also be deposited on roofs. To ensure supplies of roof-harvested rainwater are not adversely affected by bushfires, it is important that this material is prevented from entering the rainwater tank(s).

The following guidance can assist residents in maintaining the quality of water stored in their rainwater tanks.

Before a bushfire

Residents who live in bushfire-prone areas should consider installing a system whereby the pipes that direct the water from the roof to the rainwater tank(s) can be disconnected quickly and easily. This will prevent any material deposited onto the roof surface, as a result of a bushfire, from entering the rainwater tank and impairing the quality of the water stored in the rainwater tank(s). The disconnection should be made as soon as the threat of a bushfire is apparent to prevent windblown debris entering the tank and so that evacuation (if required) is not hampered. It may also be worthwhile sealing the openings to the tank to prevent contamination.

After a bushfire

If the rainwater tank has not already been disconnected from the collection pipes, disconnect or redirect the pipes as soon as it is safe to do so. Once this step has been completed, remove any dead animals present on the roof or in the guttering (wearing gloves), then clean the roof and gutters thoroughly. Cleaning the roof and the gutters with water that is known to be safe is likely to be the most effective way of removing ash and other contaminants that might be present (don't use a pressure washer if you have an asbestos roof). The use of a mild detergent and may be required for residues that won't wash off. Once the roof and gutters have been cleaned, the pipes that direct water to the tank can be reconnected. Ensure the first-flush device, if installed, is empty and in good working order.

Appropriate measures should be taken to prevent slips and falls when cleaning the roof. Take care to ensure the water used to clean the roof and gutters is not drained to an area likely to result in ponding (to avoid mosquito breeding).

If it has rained since the bushfire, and before the collection pipes have been disconnected or redirected, it is likely that ash and other contaminants will have flowed into the tank. In most cases, this will mean that the tank will need to be drained and cleaned (note that the water drained from the tank(s) may be used for non-potable uses, e.g. watering the garden, dust suppression). Once the tank has been drained and cleaned, it should be refilled with water from a source known to be safe for drinking.

If the bushfire has damaged the integrity of the tank, it is likely that the tank will require draining and repair or replacement. Take care working around rainwater tanks that have been damaged by a bushfire.

Further information

- Guidance on the use of rainwater tanks www.health.gov.au/internet/main/publishing.nsf/Content/ohp-enhealth-raintank-cnt.htm
- Safe water on rural properties www.health.qld.gov.au/__data/assets/pdf_file/0025/444616/safe-water-ruralproperties.pdf
- Contact 13 QGOV (13 74 68) for your nearest public health unit.

