Reclaimed water irrigation of pasture
for grazing of cattle and pigs

EPA 189/05: Advice on the use of water reclaimed from treated sewage effluent for irrigating pastures.

Introduction
The demand for water increases each year as urban and rural development continues. In the past the focus has been on providing fresh groundwater and surface water for domestic, municipal, industrial and agricultural purposes.

Opportunities for ecologically sustainable development can be pursued by the more efficient use of traditional sources of fresh water and by the increased use of alternative resources such as reclaimed water. However, reclaimed water from the treatment of sewage effluent requires extra management to ensure sustainability.

Restricted use
Restrictions apply under Section 32 of the Livestock Act 1997 to grazing cattle and pigs on pastures irrigated with sewage effluent. Restrictions also apply to the sale or distribution of hay grown on pastures irrigated with sewage effluent. The reason for the restriction is possible contamination of cattle and pigs with the eggs of parasitic worms (helminths).

Approval to use sewage effluent to irrigate pastures that will be used for grazing of cattle or pigs must be sought from:

Chief Veterinary Officer
Primary Industries and Resources SA
GPO Box 1671
Adelaide SA 5001

1 Updated details for Government Information Centre only
Unrestricted use
The Chief Veterinary Officer considers that water reclaimed from a sewage treatment process is not ‘sewage effluent’ for the purposes Section 32 of the Livestock Act provided it is subject to a minimum of 25 days’ total detention time through the sewage treatment process and any subsequent storage lagoons. It is considered that a minimum of 25 days’ detention is sufficient to effectively eliminate the risk of infection of cattle and pigs with tapeworm helminths. Other processes (such as filtration and disinfection) may be permitted in place of 25 days’ minimum detention provided they are specifically approved in writing by the Environment Protection Authority (EPA).

A person wishing to use water reclaimed from a sewage treatment process to irrigate pasture for the grazing of cattle and pigs, without restriction, must comply with these requirements.

Irrigation water quality
In assessing whether water reclaimed from a sewage treatment process is of suitable physical, chemical and biological quality for irrigation of pastures, graziers should take into account criteria for irrigation water quality from the South Australian Reclaimed Water Guidelines – Treated Effluent, Department of Human Services and EPA, 1999, available from the EPA web site (www.epa.sa.gov.au/pub.html), or by calling the EPA (8204 2004).

Currency of these guidelines
These guidelines offer advice to assist with compliance with the general environmental duty and specific environmental policies. They are subject to amendment and persons relying on the information should check with the EPA to ensure that it is current at any given time.

FURTHER INFORMATION

Legislation
Legislation may be viewed on the Internet at: www.parliament.sa.gov.au/dbsearch/legsearch.htm

Copies of legislation are available for purchase from:

Government Information Centre
Lands Titles Office, 101 Grenfell Street
Adelaide SA 5000

Telephone: 13 23 24
Internet: shop.service.sa.gov.au

For general information please contact:

Environment Protection Authority
GPO Box 2607
Adelaide SA 5001

E-mail: epainfo@epa.sa.gov.au

Telephone: (08) 8204 2004
Facsimile: (08) 8204 9393
Freecall (country): 1800 623 445
Internet: www.epa.sa.gov.au