

ONSITE WASTEWATER SYSTEMS CODE REVIEW UPDATE

***N MEHLIKA KAYAALP
PRINCIPAL ADVISER WASTEWATER
Department of Human Services***

THE NEED

- Latest review was in 1995
- Current situation
 - Local councils gained experience
 - They have good knowledge of their council areas
 - Technical & legislative shortcomings identified
 - New approaches & new systems emerged

NATIONAL SCENARIO

- All States / Territories are moving towards adopting AS/NZ Standards
- SA through the WWMS participated in reviewing & developing AS/NZ Standards
- “NORF” has been established to achieve a uniform approach to onsite wastewater management

CURRENT AS / NZ ONSITE SYSTEMS STANDARDS

- AS/NZ 1546.1: 1998 ***Onsite domestic wastewater treatment units Part 1 Septic tanks***
- AS/NZ 1546.2: 2001 ***Onsite domestic wastewater treatment units Part 2 Composting toilets***
- AS/NZ 1546.3: 2001 ***Onsite domestic wastewater treatment units Part 3 Aerated wastewater treatment units***
- AS/NZ 1547: 2000 ***Onsite domestic wastewater management***

APPROACH TO SA ONSITE SYSTEMS CODES REVIEW

- ***Aim:*** Local councils to administer all onsite system **installations** within their councils
- Onsite systems ***size:*** 10 EP; 2000 L/d
- Onsite systems ***types*** : all types
- ***Product approvals*** : by DHS
- Two main Codes: ***Product*** and ***Installation***

PROPOSED CHANGES

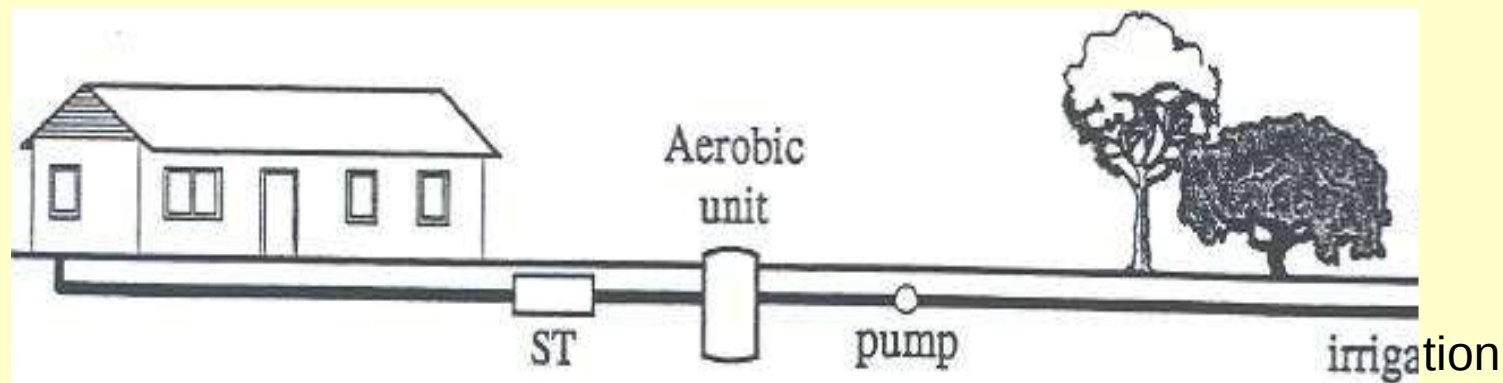
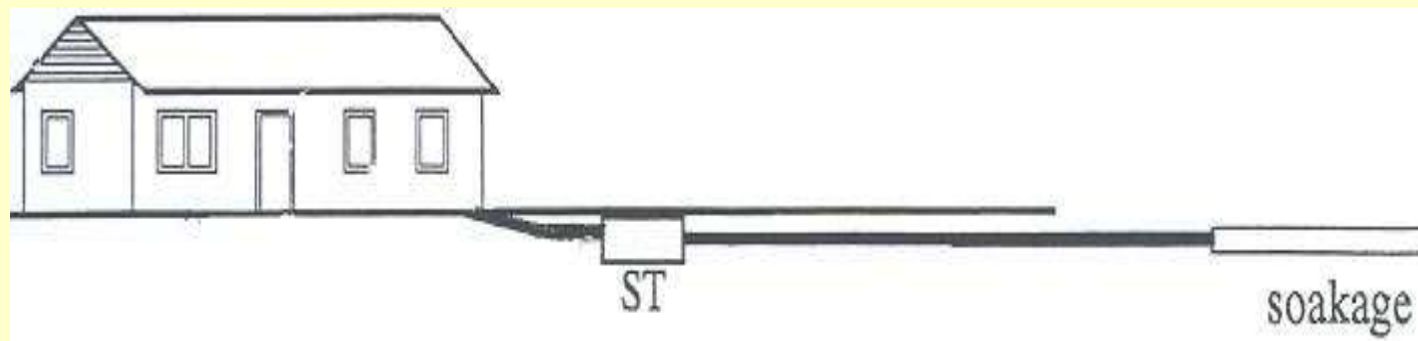
- Extend the existing SA Codes
- Incorporate AS / NZ Standards
 - Quality Assurance of products
 - pre-testing of treatment units before approval
 - all types of disposal / irrigation methods
 - training of installers, servicing agents
- Include all types & any technology
 - STs, Aerobic units, greywater, composting, nutrient removal, high-tech, low tech...

PROPOSED CHANGES

(Continued)

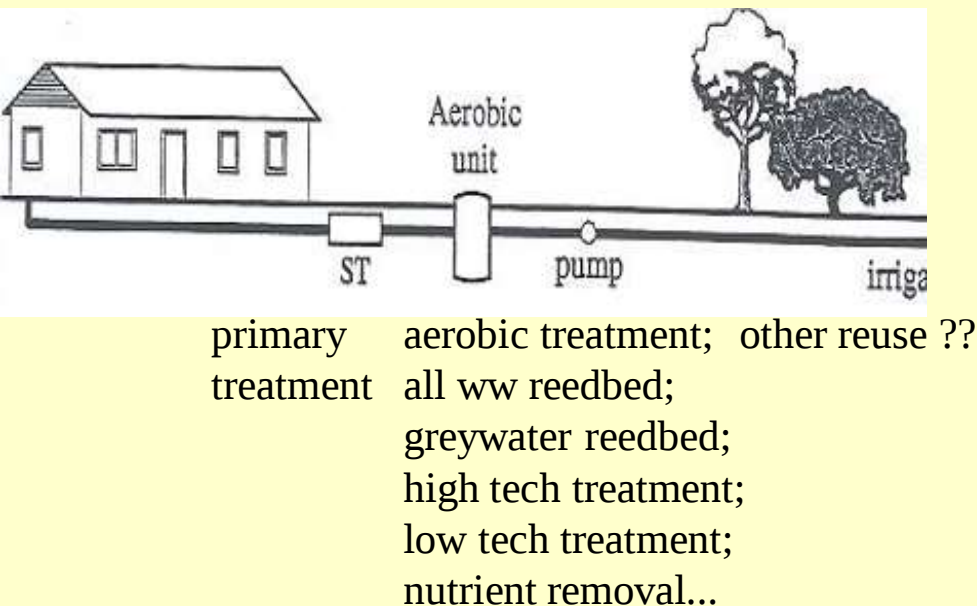
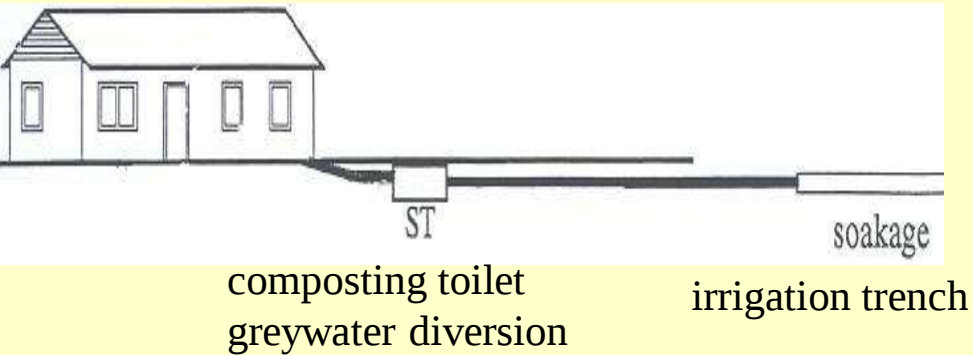
- Specific attention to Water Catchment Areas
 - different set backs for different quality effluent
 - **septic tank effluent**
 - **secondary treated effluent**
 - **nutrient reduced effluent**
- Consideration of Coastal Areas setbacks

CURRENT STANDARD SYSTEMS



Aerobic Unit can also be a Sand Filter

SYSTEMS THAT THE NEW CODES WILL COVER



- Composting toilet for blackwater
- All wastewater or greywater only reedbed
- Greywater diversion in reticulated wastewater areas (STEDS, sewers etc)
- Various treatment systems
 - nutrient removal
 - high tech
 - low tech

CONSULTATION

- So far only preliminary consultation
- Internal Consultation
 - Regional Services - DHS
 - Legal Services - DHS
 - Project Officer - P&EH Act Review - DHS
- External Consultation
 - some local council EHOs

(Adelaide Hills, DCYP, RCMB, Alexandrina, Mallala, Mt Barker, Tea Tree Gully and Gawler)

CONSULTATION -2

- External Consultation (Continued)
 - State Departments
 - *EPA : Wastewater, Mt Lofty Office & EP Water Quality Policy officers*
 - *Water Land Biodiversity Conservation*
 - *Business Manufacturers and Trade*
 - *Administrative and Information Services*
 - *Environment & Heritage / Office of Sustainability*
 - *Planning SA*
 - *Torrens & Patawalonga Catchment Water Man Bd*
 - *Onkaparinga Catchment Water Man Bd*
 - NORF and Other States & Territories
 - Plumbing Association of SA

OUTCOME OF CONSULTATION

- The ***approach & proposed changes*** supported by all agencies consulted, ie
 - ***Aim***: Local councils to administer all onsite system installations
 - ***size***: 10 EP; 2000 L/d; ***types*** of systems : all
 - ***Quality Assurance*** of products
 - ***pre-testing*** of treatment units before approval
 - ***all types*** of disposal / irrigation methods
 - ***training*** of installers, servicing agents
 - different ***set backs*** for ***different quality*** effluent

OUTCOME OF CONSULTATION - 2

- Issues emphasised by councils include:
 - review soakage requirement for good soils
 - mandatory sand filter maintenance requirement
 - requirement for regular de-sludging
 - need to address overloading during holiday times
 - inconsistencies between the existing SA Codes
 - liability issues re installations
 - need to address greywater reuse
 - bed rooms vs minimum occupancy and flow /ppd

OUTCOME OF CONSULTATION - 3

- Issues emphasised by state government agencies :
 - water protection areas to be defined legislatively
 - effluent disposal to native vegetation not to continue
 - a control mechanism- DHS to keep overall control
 - no holding tanks as long term systems
 - mandatory pump outs for all onsite systems
 - larger allotment sizes, alternate disposal sites
 - greywater needs to be addressed

OUTCOME OF CONSULTATION - 4

- Issues emphasised by state government agencies - 2:
 - responsibility of onsite systems maintenance
 - recreation area requirements
 - sustainability needs to be considered
 - different standards for different slopes
 - effluent impact on groundwater, eg fractured rock areas
 - bores installed after the wcs: WLBC legislation to deal
 - definition of watercourse

WHERE FROM HERE

- Need to follow internal procedures
 - Minister's OK to go ahead
 - P&EH Council's comments
 - Prepare Drafts: Products & Installations Codes
- A wider consultation
 - at several stages
 - all stakeholders including the industry
- Legislative changes
- Implementation
 - Need to provide a grace period for some issues