



Contact: Tony Farror
Telephone: (08) 82267161
Email: tony.farror@health.sa.gov.au

Public Health

Citi Centre Building
11 Hindmarsh Square
Adelaide SA 5000

PO Box 6, Rundle Mall
Adelaide SA 5000
DX 243

Tel (08) 8226 7100
Fax (08) 8226 7102

www.health.sa.gov.au

Our reference: 2009-03739/1

31 March 2009

Mr W Phillips
Wayne Phillips and Associates
52 Eve Rd
Bellevue Hts SA 5050

Dear Sir,

RE: INSTALLATION OF A RECYCLED WATER IRRIGATION SYSTEM FOR
CROATIA SOCCER CLUB AT WHYALLA

I refer to your application (on behalf of the City of Whyalla) seeking approval to install a recycled water irrigation system at the Croatia Soccer Club, Whyalla.

I advise that, pursuant to Public and Environmental Health (Waste Control) Regulations 7, 8, 11, 12A and 13, your application for the irrigation system has been approved subject to the following conditions.

1. The approved system consists of:
 - 1.1 Use of recycled water from the racecourse treatment plant operated by SA Water supplied through rising mains operated by the City of Whyalla.
 - 1.2 Irrigation of recycled water onto the playing surface of the soccer club in accordance with the submitted plan.
2. The irrigation system is to be installed, commissioned, operated and maintained in accordance with:
 - 2.1. The plans and specifications submitted including any amendments made/required with this approval.
 - 2.2. Manufacturers, installers and equipment suppliers' instructions and recommendations.
 - 2.3. SA Reclaimed Water Guidelines (Treated Effluent)
 - 2.4. Conditions of this approval.
3. In regards to inspection and commissioning;
 - 3.1. The Minister for Health (C/- Wastewater Management Section, Department of Health (DH)) must be advised of the completion of installation, prior to commissioning the waste control irrigation system.
 - 3.2. The Minister for Health (C/- Wastewater Management Section, DH) is to be notified in writing of the commissioning date of the system.
 - 3.3. The Minister for Health (C/- Wastewater Management Section, DH) reserves the right to inspect during construction, or upon completion, or not to inspect the installation.


4. **Backflow prevention devices must be fitted to the system as per AS/NZS 3500 and SA Water requirements to ensure all water supplies are protected from cross contamination. Certificates of compliance for backflow prevention work carried out are to be submitted to the DH and SA Water. Colour coded pipework is to be installed to the first solenoid valve on the recycled water system.**
5. An alarm system for the scheme must be connected to a suitable location to advise of any malfunctions.
6. The personnel are to be adequately trained to ensure the system is operated as required by the manufacturer and installation contractor as well as in compliance with this approval, including the reclaimed water quality monitoring and reporting requirements. Training shall also include Occupation Health and Safety aspects of system operation and maintenance.
7. Irrigation is to be carried out in accordance with the following additional requirements:
 - 7.1. The irrigation areas are to be appropriately signposted, indicating that recycled water is in use and not suitable for human consumption.
 - 7.2. All irrigation water and aerosols are to be contained within the approved irrigation areas utilising inward throwing, large droplet, low throw sprinklers. All surfaces must be dry prior to use by the public. Anemometer switching is to be installed and operated such that spray drift is minimised.
 - 7.3. Irrigation is to be between the hours of 9 pm and 5am. Note that where floodlighting is used, irrigation is not to be commenced until the lights are extinguished and all personnel have vacated the area.
8. Within **eight weeks** of the completion of the installation, engineering certification by an independent chartered professional engineer experienced in wastewater system design, construction and operation, considering all the conditions of this approval, is to be submitted to the Minister for Health (C/- Wastewater Management Section, DH) including:
 - 8.1. Structural soundness of the installation for all aspects of the system including the pumps, rising mains and reclaimed water irrigation systems.
 - 8.2. Water tightness testing of the system in accordance with the relevant standards and codes.
 - 8.3. Compliance of all components of the installation (considering materials used, construction/installation methodology, trenching, bedding, jointing, required clearances, setbacks, testing etc.) with the Standards referred to and with the conditions of this approval
 - 8.4. **Specific statements are to be included in the certification information indicating that the irrigated area has been inspected and comply with the requirements of the reclaimed water guidelines and the specific requirements of these approval conditions.**

The applicant is responsible to ensure that auditing of the wastewater system during installation is undertaken as per the standards, guidelines and specifications referred to by this approval, and that compliance is maintained with installation methods, correctness of materials used, and the testing of the system.

The engineering certification is to clearly state the compliance or otherwise with the approval, of both system components and the irrigation system as a whole.

The certification is to be based on the assessment results including tests carried out during construction of the wastewater irrigation system.

9. Within **eight weeks** of the completion of the installation, "as constructed drawings" must be provided to the Minister for Health (C/- Wastewater Management Section, DH) indicating the "as constructed" information. Drawings must be of an acceptable quality utilising standard notation, legends and legible detail and include longitudinal details and layout plans.
10. Pursuant to the Public and Environmental Health (Waste Control) Regulations, the Minister for Health (C/- Wastewater Management Section, DH) reserves the right to vary any or all of the approval conditions, and require the repair, replacement, rectification, or alteration of the system or any part thereof should at any time:
 - 10.1. The system or a component thereof not be manufactured, installed and/or operated in accordance with the approval conditions; or
 - 10.2. The system is defective and not able to perform the function for which the approval was issued; or
 - 10.3. The system is operated in a manner that is prejudicial to public and environmental health, or causes environmental nuisance; or
 - 10.4. The operator or the person or agency holding the approval for the system fails to undertake necessary monitoring of the system or provide the results as required in the Minister for Health (C/- Wastewater Management Section, DH) approval conditions.

Approved by:  (Nina Allen) Date: 31 March 2009

Manager
Wastewater Management Section
Delegate of the Minister for Health

CC: Mr T Butt, City of Whyalla
Mr G Hawken, SA Water, Whyalla

References: "City of Whyalla Irrigation Management Plan", Aquatic, dated August 2007.
Aquatek plan "Croatian Soccer club Whyalla, Irrigation System Layout" dated 29 October 2007

Note 1: The approval does not abrogate responsibilities under other Acts or Regulations to obtain the necessary approvals, permits or licences from other agencies, including but not limited to:

- Environmental Protection Agency (EPA)
- Department of Water, Land and Biodiversity Conservation
- Natural Resource Management Boards
- Development Assessment Commission (DAC) and/or the local Council
- Department of Primary Industries and Resources, South Australia

Note 2: No connection to the system is permitted until engineering certification and “as constructed” drawings have been provided to the Minister for Health (C/- Wastewater Management Section, DH) in accordance with this approval.



Contact: Tony Farror
Telephone: (08) 82267161
Email: tony.farror@health.sa.gov.au

Our reference: 2009-08107

14 December 2009

Mr W Phillips
Wayne Phillips and Associates
52 Eve Rd
Bellevue Hts
SA 5050

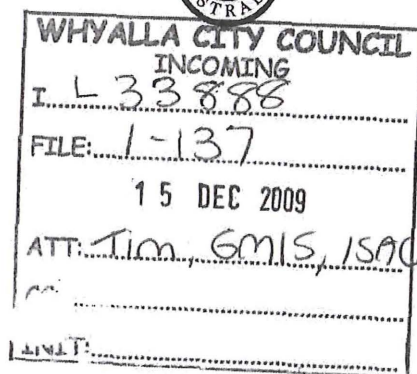
Dear Sir,

RE: INSTALLATION OF A RECYCLED WATER SYSTEM TO SERVE WILSON PARK AND THE HOCKEY GROUND AT WHYALLA

I refer to your application (on behalf of the City of Whyalla) seeking approval to install a system to irrigate recycled water sourced from the SA Water treatment plant located at the Whyalla Racecourse.

I advise that, pursuant to Public and Environmental Health (Waste Control) Regulations 7, 8, 11, 12A and 13, your application for the irrigation system has been approved subject to the following conditions.

- 1.1 The approved system consists of:
 - 1.1.1 Use of recycled water from the Racecourse treatment plant operated by SA Water with total flows of 2.8 ML/day.
 - 1.1.2 Utilisation of the pump station and rising main to the golf course currently operated by SA Water to supply reclaimed water to the following sites:
 - 1.1.2.1 Wilson Park using pop up sprinklers with a total area of 30,000 m².
 - 1.1.2.2 Whyalla Hockey ground (grassed areas) using pop up sprinklers with a total area of 6000 m²
2. The irrigation system is to be installed, commissioned, operated and maintained in accordance with:
 - 2.1. The plans and specifications submitted including any amendments made/required with this approval.
 - 2.2. Manufacturers, installers and equipment suppliers' instructions and recommendations.
 - 2.3. Australian Guidelines for Water Recycling: Managing Health and Environmental Risks Phase 1
 - 2.4. The Sewerage Code of Australia (WSA 02-2002) and any SA Water supplementary documentation.
 - 2.5. Australian/New Zealand Standard for Sanitary Plumbing and Drainage (AS/NZS 3500)



COPY

Public Health

Citi Centre Building
11 Hindmarsh Square
Adelaide SA 5000

PO Box 6, Rundle Mall
SA 5000
DX 243

Tel (08) 8226 7100
Fax (08) 8226 7102

www.health.sa.gov.au

- 2.6. Conditions of this approval.
3. In regards to inspection and commissioning;
- 3.1. The Minister for Health (C/- Wastewater Management Section, Department of Health (DH)) must be advised of the completion of installation, prior to commissioning the waste control irrigation system.
 - 3.2. The Minister for Health (C/- Wastewater Management Section, DH) is to be notified in writing of the commissioning date of the system.
 - 3.3. The Minister for Health (C/- Wastewater Management Section, DH) reserves the right to inspect during construction, or upon completion, or not to inspect the installation.
4. Backflow prevention devices must be fitted to the system as per SA Water requirements and AS/NZS 3500 by personnel holding appropriate qualifications to ensure all water supplies are protected from cross contamination. Certificates of compliance for backflow prevention work carried out are to be submitted to the DH and SA Water.
5. An alarm system for the scheme must be connected to a suitable location to advise of any malfunctions.
6. The personnel are to be adequately trained to ensure the system is operated as required by the manufacturer and installation contractor as well as in compliance with this approval, including the recycled water quality monitoring and reporting requirements. Training shall also include Occupation Health and Safety aspects of system operation and maintenance.
7. Irrigation is to be carried out in accordance with the following additional requirements:
- 7.1. The irrigation areas are to be appropriately signposted, indicating that recycled water is in use and not suitable for human consumption.
 - 7.2. All irrigation water and aerosols are to be contained within the approved irrigation areas utilising large droplet low throw sprinklers, appropriate part circle sprays and required setbacks. All surfaces must be dry prior to use by the public. Anemometer switching is to be installed to limit spraydrift.
 - 7.3. Irrigation is to be between the hours of 9 pm and 5am. Note that where floodlighting is used, irrigation is not to be commenced until the lights are extinguished and all personnel have vacated the area.
 - 7.4. Areas with barbeques and play equipment are to be protected from spraydrift by sub surface irrigation and suitable setbacks from wetted areas.
8. Within **eight weeks** of the completion of the installation, engineering certification by an independent chartered professional engineer experienced in wastewater system design, construction and operation, considering all the conditions of this approval, is to be submitted to the Minister for Health (C/- Wastewater Management Section, DH) including:
- 8.1. Structural soundness of the installation for all aspects of the system including rising mains and recycled water irrigation systems.
 - 8.2. Water tightness testing of the pipes/pumps as per the tests described in The Sewerage Code of Australia (WSA 02-2002) and any SA Water supplementary documentation and AS/NZS 3500.
 - 8.3. Compliance of all components of the installation (considering materials used, construction/installation methodology, trenching, bedding, jointing, required

clearances, setbacks, testing etc.) with the Standards referred to and with the conditions of this approval

- 8.4. Specific statements are to be included in the certification information indicating that each irrigated area has been inspected and complies with the requirements of the reclaimed water guidelines and the specific requirements of these approval conditions.**

The applicant is responsible to ensure that auditing of the wastewater system during installation is undertaken as per the standards, guidelines and specifications referred to by this approval, and that compliance is maintained with installation methods, correctness of materials used, and the testing of the system.

The engineering certification is to clearly state the compliance or otherwise with the approval, of both system components and the irrigation system as a whole. The certification is to be based on the assessment results including tests carried out during construction of the wastewater irrigation system.

9. Within **eight weeks** of the completion of the installation, "as constructed drawings" must be provided to the Minister for Health (C/- Wastewater Management Section, DH) indicating the "as constructed" information. Drawings must be of an acceptable quality utilising standard notation, legends and legible detail and include longitudinal details and layout plans.
10. Pursuant to the Public and Environmental Health (Waste Control) Regulations, the Minister for Health (C/- Wastewater Management Section, DH) reserves the right to vary any or all of the approval conditions, and require the repair, replacement, rectification, or alteration of the system or any part thereof should at any time:
- 10.1. The system or a component thereof not be manufactured, installed and/or operated in accordance with the approval conditions; or
 - 10.2. The system is defective and not able to perform the function for which the approval was issued; or
 - 10.3. The system is operated in a manner that is prejudicial to public and environmental health, or causes environmental nuisance; or
 - 10.4. The operator or the person or agency holding the approval for the system fails to undertake necessary monitoring of the system or provide the results as required in the Minister for Health (C/- Wastewater Management Section, DH) approval conditions.

Approved by:



(Tony Farror) Date: 14 June 2009

Senior Scientific Officer, Wastewater Management Section
Delegate of the Minister for Health

CC: Mr T Butt , City of Whyalla

**References: "City of Whyalla Irrigation Management Plan dated August 2006"
Aquatec August 2006.**

Note 1: The approval does not abrogate responsibilities under other Acts or Regulations to obtain the necessary approvals, permits or licences from other agencies, including but not limited to:

- Environmental Protection Agency (EPA)
- Department of Water, Land and Biodiversity Conservation
- Natural Resource Management Boards
- Development Assessment Commission (DAC) and/or the local Council
- Department of Primary Industries and Resources, South Australia

Note 2: This approval is issued on the basis of information provided by the applicant and by the City of Whyalla and that operation and maintenance of the scheme once constructed will be carried out by the Council or their agents.

Note 3: No connection to the system is permitted until engineering certification and "as constructed" drawings have been provided to the Minister for Health (C/- Wastewater Management Section, DH) in accordance with this approval.

COPY



Government of South Australia

SA Health

Contact: Luke Seidel
Telephone: (08) 8226 7164
Email: luke.seidel@health.sa.gov.au

29 January 2010

Wayne Phillips
Wayne Phillips and Associates
52 Eve Road
BELLEVUE HEIGHTS SA 5050

COPY

Public Health

Citi Centre Building
11 Hindmarsh Square
Adelaide SA 5000

PO Box 6, Rundle Mall
SA 5000
DX 243

Tel (08) 8226 7100
Fax (08) 8226 7102

www.health.sa.gov.au

Dear Sir,

RE: WHYALLA COUNCIL RECLAIMED WATER SCHEME

Please be advised that receipt is acknowledged for the engineering certification for the abovementioned reclaimed water scheme. This satisfies the following Department of Health approval conditions;

- Condition 9 of WCS2189 (Arboretum, Civic Park, Schultz Park, OLHC School, Bennet Oval, Central Whyalla Football Club Oval, and Westlands Rounabout)
- Condition 8 of 2009-03739/1 (Croatia Soccer Club)
- Condition 8 of 2009-08107/1 (Wilson Park and Whyalla Hockey Ground)

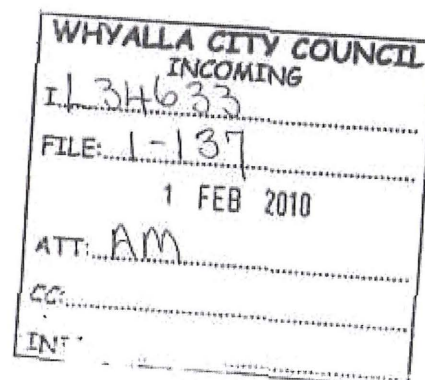
It should be noted that 'as constructed' drawings for the three approvals list above are outstanding. All approval conditions are not satisfied until this information is provided.

Please do not hesitate to contact me if you have any questions in relation to this correspondence.

Yours sincerely,

Luke Seidel
Project Officer (Wastewater and Planning)
Wastewater Management

Cc: City of Whyalla

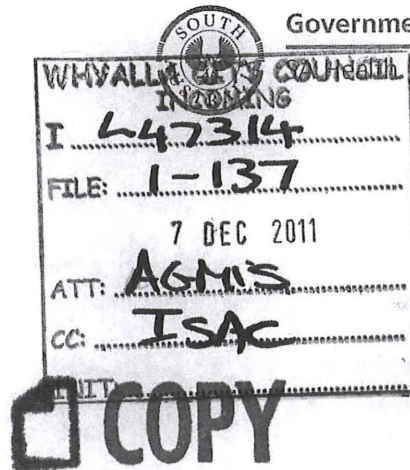


Contact: Luke Seidel
 Telephone: (08) 8226 7164
 Email: luke.seidel@health.sa.gov.au

Our reference: 2011-12546/1

2 December 2011

Dave Pennington
 Australian Water Environments
 1/198 Greenhill Road
 EASTWOOD SA 5063



Public Health
 Citi Centre Building
 11 Hindmarsh Square
 Adelaide SA 5000
 PO Box 6
 Rundle Mall SA 5000
 DX 243
 Tel 08 8226 7100
 Fax 08 8226 7102
 ABN 97 643 356 590
 www.health.sa.gov.au

Dear Sir,

RE: EXTENSION OF THE WHYALLA RECYCLED WATER SCHEME

I refer to your application on behalf of the City of Whyalla seeking approval for the use of recycled water from the SA Water wastewater treatment plant for irrigation of various sites at Whyalla incorporating the installation of recycled water rising mains and booster pumps.

I advise that, pursuant to Public and Environmental Health (Waste Control) Regulations 7, 8, 11, 13 and 14 your application has been approved subject to the following conditions.

1. The approved system consists of:
 - 1.1. Use of recycled water from the SA Water Whyalla Wastewater Treatment Plant utilising pressurised subsurface irrigation at the following sites, as per the submitted plans:
 - 1.1.1. Nicholson Avenue west of Jenkins Avenue as far as Bastyan Crescent;
 - 1.1.2. Lincoln Highway between Keith Street and McDouall Stuart Avenue;
 - 1.1.3. Playford Avenue between Barter Street and McBryde Terrace;
 - 1.1.4. Jenkins Avenue between Custance Avenue and Norrie Avenue (including McDouall Stuart Avenue and Nicholson Avenue Roundabouts); and
 - 1.1.5. Essington Lewis Avenue between Broadbent Terrace and Farrel Street, and Essington Lewis Avenue north of Elliot Street
2. The irrigation system is to be installed, commissioned, operated and maintained in accordance with:
 - 2.1. The plans and specifications submitted including any amendments made/required with this approval.
 - 2.2. Manufacturers, installers and equipment suppliers' instructions and recommendations.
 - 2.3. Australian Guidelines for Water Recycling: Managing Health and Environmental Risks Phase 1
 - 2.4. The Sewerage Code of Australia (WSA 02-2002) and any SA Water supplementary documentation.
 - 2.5. Australian/New Zealand Standard for Sanitary Plumbing and Drainage (AS/NZS 3500)
 - 2.6. Conditions of this approval.
3. In regards to inspection and commissioning;

- 3.1. The Minister for Health (C/- Wastewater Management Section, Department of Health (DH)) must be advised of the completion of installation, prior to commissioning the waste control irrigation system.
 - 3.2. The Minister for Health (C/- Wastewater Management Section, DH) is to be notified in writing of the commissioning date of the system.
 - 3.3. The Minister for Health (C/- Wastewater Management Section, DH) reserves the right to inspect during construction, or upon completion, or not to inspect the installation.
4. **Backflow prevention devices must be fitted as per AS/NZS 3500 by personnel holding appropriate qualifications to ensure all water supplies are protected from cross contamination. Backflow Prevention Device Inspection and Maintenance Report sheets for backflow prevention work carried out are to be submitted to the DH and SA Water within 14 days. A full backflow prevention audit must be carried out by a certified backflow prevention tester in conjunction with the certifying engineer, and comply with all requirements prior to the use of recycled water. All backflow prevention devices must be tested and reported to the DH annually.**
 5. An alarm system for the scheme must be connected to a suitable location to advise of any malfunctions.
 6. The personnel are to be adequately trained to ensure the system is operated as required by the manufacturer and installation contractor as well as in compliance with this approval, including the recycled water quality monitoring and reporting requirements. Training shall also include Occupation Health and Safety aspects of system operation and maintenance.
 7. Irrigation is to be carried out in accordance with the following additional requirements:
 - 7.1. Prominent warning signs will be erected stating "RECYCLED WATER USED FOR IRRIGATION – NOT SUITABLE FOR HUMAN CONTACT/CONSUMPTION".
 - 7.2. The irrigation areas are to be monitored to ensure runoff is not occurring.
 - 7.3. All valves at the site must be locked or fitted with removable controls.

All new irrigation pipe work including sprinkler system and valves will be of lilac colour and/or clearly labelled to indicate recycled water.
 8. **Within eight weeks of the completion of the installation, engineering certification by an independent chartered professional engineer experienced in wastewater system design, construction and operation, considering all the conditions of this approval, is to be submitted to the Minister for Health (C/- Wastewater Management Section, DH) including:**
 - 8.1. Structural soundness of the installation for all aspects of the system including rising mains and recycled water irrigation systems.
 - 8.2. Water tightness testing of the pipes and rising mains
 - 8.3. Compliance of all components of the installation (considering materials used, construction/installation methodology, trenching, bedding, jointing, required clearances, setbacks, testing etc.) with the Standards referred to and with the conditions of this approval
 - 8.4. Certification that any required backflow prevention devices have been installed and a full backflow prevention audit has been carried out for each site, in accordance with Clause 4.
 - 8.5. **Specific statements are to be included in the certification information indicating that each irrigated area has been inspected and complies with the requirements of the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks Phase 1 and the specific requirements of these approval conditions.**

The applicant is responsible to ensure that auditing of the wastewater system during installation is undertaken as per the standards, guidelines and specifications referred to by this approval, and that compliance is maintained with installation methods, correctness of materials used, and the testing of the system.

The engineering certification is to clearly state the compliance or otherwise with the approval, of both system components and the irrigation system as a whole. The certification is to be based on the assessment results including tests carried out during construction of the wastewater irrigation system.

9. Within **eight weeks** of the completion of the installation, "as constructed" drawings must be provided to the Minister for Health (C/- Wastewater Management Section, DH) indicating the "as constructed" information. Drawings must be of an acceptable quality utilising standard notation, legends and legible detail and include longitudinal details and layout plans.
10. Pursuant to the Public and Environmental Health (Waste Control) Regulations, the Minister for Health (C/- Wastewater Management Section, DH) reserves the right to vary any or all of the approval conditions, and require the repair, replacement, rectification, or alteration of the system or any part thereof should at any time:
 - 10.1. The system or a component thereof not be manufactured, installed and/or operated in accordance with the approval conditions; or
 - 10.2. The system is defective and not able to perform the function for which the approval was issued; or
 - 10.3. The system is operated in a manner that is prejudicial to public and environmental health, or causes environmental nuisance; or
 - 10.4. The operator or the person or agency holding the approval for the system fails to undertake necessary monitoring of the system or provide the results as required in the Minister for Health (C/- Wastewater Management Section, DH) approval conditions.

Approved by:



(Anthony Farror) Date: 2 December 2011

Manager, Wastewater Management Section
Delegate of the Minister for Health

CC: Mr Alan Wilmshurst, City of Whyalla

References: All information provided by Australian Water Environments

Note 1: The approval does not abrogate responsibilities under other Acts or Regulations to obtain the necessary approvals, permits or licences from other agencies, including but not limited to:

- Environmental Protection Agency (EPA)
- Department of Water, Land and Biodiversity Conservation
- Natural Resource Management Boards
- Development Assessment Commission (DAC) and/or the local Council
- Department of Primary Industries and Resources, South Australia

Note 2: This approval is issued on the basis of information provided by the applicant and that operation and maintenance of the scheme once constructed will be carried out by the Council or their agents.

Note 3: No connection to the system is permitted until engineering certification and "as constructed" drawings have been provided to the Minister for Health (C/- Wastewater Management Section, DH) in accordance with this approval



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Telephone: (08) 8226 7164
Email: luke.seidel@health.sa.gov.au

Public Health

Citi Centre Building
11 Hindmarsh Square
Adelaide SA 5000

PO Box 6, Rundle Mall
SA 5000
DX 243

Tel (08) 8226 7100
Fax (08) 8226 7102

www.health.sa.gov.au

Our reference: 2011-04620/1

{ June 2011

Mr W Phillips
Wayne Phillips and Associates
52 Eve Rd
BELLEVUE HEIGHTS SA 5050

Dear Sir,

RE: USE OF RECYCLED WATER FOR IRRIGATION OF STUART OVAL, MEMORIAL OVAL, JUBILEE PARK, BRADFORD RESERVE, AND VARIOUS MEDIAN STRIPS AT WHYALLA INCORPORATING THE INSTALLATION OF RECYCLED WATER RISING MAINS AND BOOSTER PUMPS.

I refer to your application on behalf of the City of Whyalla seeking approval for the use of recycled water from the SA Water wastewater treatment plant for irrigation of various sites at Whyalla incorporating the installation of recycled water rising mains and booster pumps.

I advise that, pursuant to Public and Environmental Health (Waste Control) Regulations 7, 8, 11, 13 and 14 your application has been approved subject to the following conditions.

1. The approved system consists of:
 - 1.1. Recycled water rising mains and booster pump as shown on the plans and specified by the design engineer serving the Stuart Oval, Memorial Oval, Jubilee Park, Bradford Reserve and various median strips at Whyalla.
 - 1.2. Use of recycled water from the SA Water Whyalla Wastewater Treatment Plant utilising pressurised subsurface irrigation at the following sites, as per the submitted plans:
 - 1.2.1. Stuart Oval
 - 1.2.2. Memorial Oval
 - 1.2.3. Nicolson Avenue median strip from the roundabout at Jenkins Avenue to the end
 - 1.2.4. McDouall Stuart Avenue median strip from Lincoln Highway to Jenkins Avenue
 - 1.2.5. Bradford Avenue traffic islands from Nicolson Avenue for a total of five islands
 - 1.3. Use of recycled water from the SA Water Whyalla Wastewater Treatment Plant utilising surface irrigation at the following sites, as per the submitted plans:
 - 1.3.1. Jubilee Park
 - 1.3.2. Bradford reserve
2. The irrigation system is to be installed, commissioned, operated and maintained in accordance with:
 - 2.1. The plans and specifications submitted including any amendments made/required with this approval.
 - 2.2. Manufacturers, installers and equipment suppliers' instructions and recommendations.
 - 2.3. Australian Guidelines for Water Recycling: Managing Health and Environmental Risks Phase 1

- 2.4. The Sewerage Code of Australia (WSA 02-2002) and any SA Water supplementary documentation.
 - 2.5. Australian/New Zealand Standard for Sanitary Plumbing and Drainage (AS/NZS 3500)
 - 2.6. Conditions of this approval.
3. In regards to inspection and commissioning;
- 3.1. The Minister for Health (C/- Wastewater Management Section, Department of Health (DH)) must be advised of the completion of installation, prior to commissioning the waste control irrigation system.
 - 3.2. The Minister for Health (C/- Wastewater Management Section, DH) is to be notified in writing of the commissioning date of the system.
 - 3.3. The Minister for Health (C/- Wastewater Management Section, DH) reserves the right to inspect during construction, or upon completion, or not to inspect the installation.
4. Backflow prevention devices must be fitted as per AS/NZS 3500 by personnel holding appropriate qualifications to ensure all water supplies are protected from cross contamination. Backflow Prevention Device Inspection and Maintenance Report sheets for backflow prevention work carried out are to be submitted to the DH and SA Water within 14 days. A full backflow prevention audit must be carried out by a certified backflow prevention tester in conjunction with the certifying engineer, and comply with all requirements prior to the use of recycled water. All backflow prevention devices must be tested and reported to the DH annually.
5. An alarm system for the scheme must be connected to a suitable location to advise of any malfunctions.
6. The personnel are to be adequately trained to ensure the system is operated as required by the manufacturer and installation contractor as well as in compliance with this approval, including the recycled water quality monitoring and reporting requirements. Training shall also include Occupation Health and Safety aspects of system operation and maintenance.
7. Irrigation is to be carried out in accordance with the following additional requirements:
- 7.1. There will be no spray irrigation between the hours of 6 am to 10 pm. Note that where floodlighting is used, irrigation is not to be commenced until the lights are extinguished and all personnel have vacated the area.
 - 7.2. Prominent warning signs will be erected stating "RECYCLED WATER USED FOR IRRIGATION – NOT SUITABLE FOR HUMAN CONTACT/CONSUMPTION".
 - 7.3. The irrigation areas are to be monitored to ensure runoff is not occurring.
 - 7.4. All irrigated surfaces must be dry prior to use.
 - 7.5. For spray irrigation all irrigation water and aerosols are to be contained within the approved irrigation areas utilising large droplet low throw sprinklers, appropriate part circle sprays and required setbacks.
 - 7.6. Any playground equipment or benches installed within close proximity to the spray irrigation system must not allow pooling of recycled water.
 - 7.7. All valves at the site must be locked or fitted with removable controls.
 - 7.8. Anemometer switching is to be installed and spray irrigation is to cease if the wind speed exceeds 20 km /hour.
- All new irrigation pipe work including sprinkler system and valves will be of lilac colour and/or clearly labelled to indicate recycled water.
8. Within eight weeks of the completion of the installation, engineering certification by an independent chartered professional engineer experienced in wastewater system design, construction and

operation, considering all the conditions of this approval, is to be submitted to the Minister for Health (C/- Wastewater Management Section, DH) including:

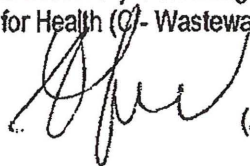
- 8.1. Structural soundness of the installation for all aspects of the system including rising mains, pumps, pump sumps and recycled water irrigation systems.
- 8.2. Water tightness testing of the pipes, pumps and rising mains as per the tests described in The Sewerage Code of Australia (WSA 02-2002) and any SA Water supplementary documentation and AS/NZS 3500.
- 8.3. Compliance of all components of the installation (considering materials used, construction/installation methodology, trenching, bedding, jointing, required clearances, setbacks, testing etc.) with the Standards referred to and with the conditions of this approval
- 8.4. Certification that all backflow prevention devices have been installed and a full backflow prevention audit has been carried out for each site, in accordance with Clause 4.
- 8.5. Specific statements are to be included in the certification information indicating that each irrigated area has been inspected and complies with the requirements of the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks Phase 1 and the specific requirements of these approval conditions.

The applicant is responsible to ensure that auditing of the wastewater system during installation is undertaken as per the standards, guidelines and specifications referred to by this approval, and that compliance is maintained with installation methods, correctness of materials used, and the testing of the system.

The engineering certification is to clearly state the compliance or otherwise with the approval, of both system components and the irrigation system as a whole. The certification is to be based on the assessment results including tests carried out during construction of the wastewater irrigation system.

9. Within eight weeks of the completion of the installation, "as constructed" drawings must be provided to the Minister for Health (C/- Wastewater Management Section, DH) indicating the "as constructed" information. Drawings must be of an acceptable quality utilising standard notation, legends and legible detail and include longitudinal details and layout plans.
10. Pursuant to the Public and Environmental Health (Waste Control) Regulations, the Minister for Health (C/- Wastewater Management Section, DH) reserves the right to vary any or all of the approval conditions, and require the repair, replacement, rectification, or alteration of the system or any part thereof should at any time:
 - 10.1. The system or a component thereof not be manufactured, installed and/or operated in accordance with the approval conditions; or
 - 10.2. The system is defective and not able to perform the function for which the approval was issued; or
 - 10.3. The system is operated in a manner that is prejudicial to public and environmental health, or causes environmental nuisance; or
 - 10.4. The operator or the person or agency holding the approval for the system fails to undertake necessary monitoring of the system or provide the results as required in the Minister for Health (C/- Wastewater Management Section, DH) approval conditions.

Approved by:



(Anthony Farror) Date: } June 2011

Manager, Wastewater Management Section
Delegate of the Minister for Health

CC: Mr T Butt , City of Whyalla

References: All information provided by Wayne Phillips and Associates and Greene Eden Watering Systems Pty Ltd, including any amendments

Note 1: The approval does not abrogate responsibilities under other Acts or Regulations to obtain the necessary approvals, permits or licences from other agencies, including but not limited to:

- Environmental Protection Agency (EPA)
- Department of Water, Land and Biodiversity Conservation
- Natural Resource Management Boards
- Development Assessment Commission (DAC) and/or the local Council
- Department of Primary Industries and Resources, South Australia

Note 2: This approval is issued on the basis of information provided by the applicant and that operation and maintenance of the scheme once constructed will be carried out by the Council or their agents.

Note 3: No connection to the system is permitted until engineering certification and "as constructed" drawings have been provided to the Minister for Health (C/- Wastewater Management Section, DH) in accordance with this approval



Government of South Australia

SA Health

Contact: Luke Seidel
Telephone: (08) 8226 7164
Email: luke.seidel@health.sa.gov.au

15 SEP 2011

Our reference: 2011-06333/1

5 September 2011

Mr W Phillips
Wayne Phillips and Associates
52 Eve Rd
BELLEVUE HEIGHTS SA 5050

COPY	
MAYALLA CITY COUNCIL	
INCOMING	
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FILE:	1-139
29 SEP 2011	
ATT:	AGMIS
CC:	L/EO
SENT:	

Public Health
Citi Centre Building
11 Hindmarsh Square
Adelaide SA 5000
PO Box 6
Rundle Mail SA 5000
DX 243
Tel 08 8226 7100
Fax 08 8226 7102
ABN 97 643 356 590
www.health.sa.gov.au

Dear Sir,

RE: EXTENSION OF THE WHYALLA RECYCLED WATER SCHEME

I refer to your application on behalf of the City of Whyalla seeking approval for the use of recycled water from the SA Water wastewater treatment plant for irrigation of various sites at Whyalla incorporating the installation of recycled water rising mains and booster pumps.

I advise that, pursuant to Public and Environmental Health (Waste Control) Regulations 7, 8, 11, 13 and 14 your application has been approved subject to the following conditions.

1. The approved system consists of:
 - 1.1. Use of recycled water from the SA Water Whyalla Wastewater Treatment Plant utilising pressurised subsurface irrigation at the following sites, as per the submitted plans:
 - 1.1.1. Whyalla Sturt Campus Ovals
 - 1.1.2. Edward John Eyre High School Ovals
 - 1.1.3. Nicolson Avenue Primary School Oval
 - 1.1.4. Lions Soccer Field
 - 1.1.5. Fisk Street Primary School
 - 1.1.6. Hincks Avenue Primary School
 - 1.1.7. Long Street Primary School
 - 1.1.8. Samaritan College Oval
 - 1.1.9. Sunrise School Oval
 - 1.1.10. The Wanderers Soccer Field
 - 1.1.11. Median strips along Norrie Avenue, Nicolson Avenue, McDouall Stuart Avenue, and Bradford Avenue
2. The irrigation system is to be installed, commissioned, operated and maintained in accordance with:
 - 2.1. The plans and specifications submitted including any amendments made/required with this approval.
 - 2.2. Manufacturers, installers and equipment suppliers' instructions and recommendations.
 - 2.3. Australian Guidelines for Water Recycling: Managing Health and Environmental Risks Phase 1
 - 2.4. The Sewerage Code of Australia (WSA 02-2002) and any SA Water supplementary documentation.
 - 2.5. Australian/New Zealand Standard for Sanitary Plumbing and Drainage (AS/NZS 3500)
 - 2.6. Conditions of this approval.

3. In regards to inspection and commissioning;
 - 3.1. The Minister for Health (C/- Wastewater Management Section, Department of Health (DH)) must be advised of the completion of installation, prior to commissioning the waste control irrigation system.
 - 3.2. The Minister for Health (C/- Wastewater Management Section, DH) is to be notified in writing of the commissioning date of the system.
 - 3.3. The Minister for Health (C/- Wastewater Management Section, DH) reserves the right to inspect during construction, or upon completion, or not to inspect the installation.
4. Backflow prevention devices must be fitted as per AS/NZS 3500 by personnel holding appropriate qualifications to ensure all water supplies are protected from cross contamination. Backflow Prevention Device Inspection and Maintenance Report sheets for backflow prevention work carried out are to be submitted to the DH and SA Water within 14 days. A full backflow prevention audit must be carried out by a certified backflow prevention tester in conjunction with the certifying engineer, and comply with all requirements prior to the use of recycled water. All backflow prevention devices must be tested and reported to the DH annually.
5. An alarm system for the scheme must be connected to a suitable location to advise of any malfunctions.
6. The personnel are to be adequately trained to ensure the system is operated as required by the manufacturer and installation contractor as well as in compliance with this approval, including the recycled water quality monitoring and reporting requirements. Training shall also include Occupation Health and Safety aspects of system operation and maintenance.
7. Irrigation is to be carried out in accordance with the following additional requirements:
 - 7.1. Prominent warning signs will be erected stating "RECYCLED WATER USED FOR IRRIGATION – NOT SUITABLE FOR HUMAN CONTACT/CONSUMPTION".
 - 7.2. Prominent warning signs will be erected stating "SUBSURFACE IRRIGATION SYSTEM INSTALLED - NO PEGS OR STAKES ARE TO BE DRIVEN INTO THE TURF AREAS"
 - 7.3. The irrigation areas are to be monitored to ensure runoff is not occurring.
 - 7.4. All irrigated surfaces must be dry prior to use.
 - 7.5. All valves at the site must be locked or fitted with removable controls.

All new irrigation pipe work including sprinkler system and valves will be of lilac colour and/or clearly labelled to indicate recycled water.

8. Within eight weeks of the completion of the installation, engineering certification by an independent chartered professional engineer experienced in wastewater system design, construction and operation, considering all the conditions of this approval, is to be submitted to the Minister for Health (C/- Wastewater Management Section, DH) including:
 - 8.1. Structural soundness of the installation for all aspects of the system including rising mains, pumps, pump sumps and recycled water irrigation systems.
 - 8.2. Water tightness testing of the pipes and rising mains
 - 8.3. Compliance of all components of the installation (considering materials used, construction/installation methodology, trenching, bedding, jointing, required clearances, setbacks, testing etc.) with the Standards referred to and with the conditions of this approval

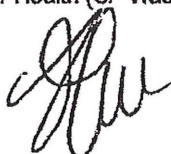
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Approved by:



(Anthony Farror) Date: 5 September 2011

Manager, Wastewater Management Section
Delegate of the Minister for Health

CC: Mr T Butt , City of Whyalla

References: All information provided by Wayne Phillips and Associates and Greene Eden Watering Systems Pty Ltd, including any amendments

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