

Blantyre Farms, Murringo Rd, Young NSW 2594  
 EPA public register: <http://www.epa.nsw.gov.au/publicregister/>

EPL 1643

Effluent Volume Monitoring - Monitoring Point 2

| Year                | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|---------------------|-----------|-----------|-----------|-----------|
| Unit of Measure     | kL/day    | kL/day    | kL/day    | kL/day    |
| Frequency           | Daily     | Daily     | Daily     | Daily     |
| No. of measurements | 365       | 365       | 365       | 365       |
| Lowest result       | 0         | 0         | 0         | 0         |
| Mean result         | 12.3      | 24.1      | 16.93     | 46.91     |
| Highest result      | 150       | 158       | 180       | 135       |

EPL 11468

Effluent Quality Monitoring - Point 3 - Yearly frequency

| Date                    |       | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|-------------------------|-------|-----------|-----------|-----------|-----------|
| Conductivity            | µS/cm | 26000     | 27000     | 24800     | 19600     |
| Nitrogen - total        | mg/L  | 65        | 2100      | 2410      | 1750      |
| pH                      | pH    | 7.9       | 7.9       | 8.02      | 8.08      |
| Phosphorus - total      | mg/L  | 11        | 42        | 42.8      | 32.8      |
| Sodium Adsorption Ratio | mg/L  | 44        | 16        | 44.4      | 32.1      |

SEP's Waste Monitoring - Point 5 - Yearly frequency

| Date               |       | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|--------------------|-------|-----------|-----------|-----------|-----------|
| Nitrogen - total   | mg/kg | 24000     | 19000     | 23000     | 16300     |
| Phosphorus - total | mg/kg | 26000     | 70000     | 24100     | 24900     |
| Potassium          | mg/kg | 9600      | 7800      | 5400      | 4150      |
| Sodium             | mg/kg | 4300      | 4400      | 1660      | 1270      |

Groundwater monitoring - Yearly frequency

Point 7 (DHG2)

| Date                 |       | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|----------------------|-------|-----------|-----------|-----------|-----------|
| Ammonia              | mg/L  | <0.01     | 0.02      | <0.01     | 0.06      |
| Conductivity         | µS/cm | 3400      | 3500      | 3300      | 3800      |
| Nitrate              | mg/L  | 2         | 1.7       | 1.8       | 1.8       |
| pH                   | pH    | 7.4       | 7.9       | 7.3       | 7.8       |
| Standing Water Level | M     | 27        | 27        | 35        | 28        |

Point 10 (DHG5)

| Date                 |       | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|----------------------|-------|-----------|-----------|-----------|-----------|
| Ammonia              | mg/L  | 0.17      |           |           |           |
| Conductivity         | µS/cm | 4900      |           |           |           |
| Nitrate              | mg/L  | 0.19      |           |           |           |
| pH                   | pH    | 8.1       |           |           |           |
| Standing Water Level | M     | 35        | Dry       | Dry       | Dry       |

Point 11 (DHG6)

| Date                 |       | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|----------------------|-------|-----------|-----------|-----------|-----------|
| Ammonia              | mg/L  |           |           |           |           |
| Conductivity         | µS/cm |           |           |           |           |
| Nitrate              | mg/L  |           |           |           |           |
| pH                   | pH    |           |           |           |           |
| Standing Water Level | M     | Dry       | Dry       | Dry       | Dry       |

## Soils monitoring - Yearly frequency

## Point 16 (YP)

| Date                     |         | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|--------------------------|---------|-----------|-----------|-----------|-----------|
| Aluminium                | cmol(+) | <0.1      | <0.1      | <0.1      | <0.1      |
| Available Phosphorus     | mg/kg   | 26        | 40        | 25        | 33        |
| Calcium                  | cmol(+) | 2.2       | 2.1       | 2.3       | 2.9       |
| Cation Exchange Capacity | cmol(+) | 3.6       | 3.5       | 3.7       | 4.7       |
| Chloride                 | mg/kg   | 13        | 21        | <10       | 23        |
| Conductivity             | dS/m    | 0.07      | 0.09      | 0.05      | 0.09      |
| Magnesium                | cmol(+) | 0.5       | 0.6       | 0.6       | 0.8       |
| Nitrate                  | mg/kg   | 10        | 24        | 12        | 15        |
| Nitrogen - total         | mg/kg   | 1700      | 1900      | 1400      | 1900      |
| Organic Carbon           | %       | 1         | 1.6       | 1.3       | 2.2       |
| pH                       | pH      | 6.1       | 6         | 6         | 5.8       |
| Potassium                | cmol(+) | 0.91      | 0.85      | 0.82      | 0.99      |
| Sodium                   | cmol(+) | 0.03      | 0.03      | 0.06      | 0.05      |

## Point 17 (YS)

| Date                     |         | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|--------------------------|---------|-----------|-----------|-----------|-----------|
| Aluminium                | cmol(+) | <0.1      | <0.1      | <0.1      | <0.1      |
| Available Phosphorus     | mg/kg   | 56        | 67        | 37        | 66        |
| Calcium                  | cmol(+) | 2.9       | 2.8       | 2.6       | 3.7       |
| Cation Exchange Capacity | cmol(+) | 3.7       | 3.8       | 3.5       | 5.3       |
| Chloride                 | mg/kg   | <10       | <10       | <10       | <10       |
| Conductivity             | dS/m    | 0.05      | 0.04      | 0.04      | 0.07      |
| Magnesium                | cmol(+) | 0.5       | 0.6       | 0.5       | 0.8       |
| Nitrate                  | mg/kg   | 8         | 5         | 8.2       | 7.4       |
| Nitrogen - total         | mg/kg   | 1400      | 1100      | 1100      | 1700      |
| Organic Carbon           | %       | 0.9       | 1.2       | 1         | 1.8       |
| pH                       | pH      | 6.5       | 6.4       | 6.3       | 6.5       |
| Potassium                | cmol(+) | 0.35      | 0.44      | 0.4       | 0.65      |
| Sodium                   | cmol(+) | <0.02     | <0.02     | <0.02     | 0.05      |

## Point 18 (RP)

| Date                     |         | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|--------------------------|---------|-----------|-----------|-----------|-----------|
| Aluminium                | cmol(+) | <0.1      | <0.1      | <0.1      | <0.1      |
| Available Phosphorus     | mg/kg   | 39        | 66        | 49        | 98        |
| Calcium                  | cmol(+) | 3.3       | 4.5       | 3.4       | 5.9       |
| Cation Exchange Capacity | cmol(+) | 4.6       | 6.3       | 4.8       | 8.1       |
| Chloride                 | mg/kg   | 13        | <10       | <10       | <10       |
| Conductivity             | dS/m    | 0.09      | 0.09      | 0.1       | 0.26      |
| Magnesium                | cmol(+) | 0.6       | 0.9       | 0.7       | 1.1       |
| Nitrate                  | mg/kg   | 26        | 21        | 39        | 16        |
| Nitrogen - total         | mg/kg   | 1900      | 1900      | 1400      | 2000      |
| Organic Carbon           | %       | 1         | 1.7       | 1.3       | 2.2       |
| pH                       | pH      | 6.3       | 6.6       | 6.1       | 6.3       |
| Potassium                | cmol(+) | 0.7       | 0.91      | 0.75      | 1         |
| Sodium                   | cmol(+) | <0.02     | 0.05      | <0.02     | 0.05      |

## Point 19 (RE)

| Date                     |         | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|--------------------------|---------|-----------|-----------|-----------|-----------|
| Aluminium                | cmol(+) | <0.1      | <0.1      | <0.1      | <0.1      |
| Available Phosphorus     | mg/kg   | 15        | 86        | 18        | 62        |
| Calcium                  | cmol(+) | 5         | 5         | 5.7       | 7.5       |
| Cation Exchange Capacity | cmol(+) | 8.1       | 7.4       | 8.3       | 11.1      |
| Chloride                 | mg/kg   | 10        | <10       | <10       | 12        |
| Conductivity             | dS/m    | 0.06      | 0.07      | 0.05      | 0.09      |
| Magnesium                | cmol(+) | 1.7       | 1.4       | 1.5       | 2         |
| Nitrate                  | mg/kg   | 7         | 5         | 8.3       | 8.1       |
| Nitrogen - total         | mg/kg   | 1700      | 3000      | 1500      | 1800      |
| Organic Carbon           | %       | 1.4       | 2.6       | 1.5       | 2.3       |
| pH                       | pH      | 6.4       | 6.5       | 6.4       | 6.5       |
| Potassium                | cmol(+) | 1.4       | 1         | 1.1       | 1.6       |
| Sodium                   | cmol(+) | 0.04      | 0.03      | <0.02     | 0.03      |

## Point 20 (LI)

| Date                     |         | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|--------------------------|---------|-----------|-----------|-----------|-----------|
| Aluminium                | cmol(+) | <0.1      | <0.1      | <0.1      | <0.1      |
| Available Phosphorus     | mg/kg   | 39        | 23        | 42        | 65        |
| Calcium                  | cmol(+) | 3.9       | 3.3       | 4.3       | 5.6       |
| Cation Exchange Capacity | cmol(+) | 4.9       | 4.5       | 5.5       | 7.3       |
| Chloride                 | mg/kg   | <10       | 11        | <10       | <10       |
| Conductivity             | dS/m    | 0.06      | 0.06      | 0.05      | 0.1       |
| Magnesium                | cmol(+) | 0.6       | 0.8       | 0.8       | 1         |
| Nitrate                  | mg/kg   | 6         | 18        | 9.9       | 34        |
| Nitrogen - total         | mg/kg   | 1800      | 1600      | 1300      | 2500      |
| Organic Carbon           | %       | 0.8       | 1.9       | 1.2       | 2.7       |
| pH                       | pH      | 7.3       | 5.8       | 6.9       | 5.9       |
| Potassium                | cmol(+) | 0.43      | 0.23      | 0.43      | 0.73      |
| Sodium                   | cmol(+) | <0.02     | 0.07      | <0.02     | <0.02     |

Soils monitoring - 3 yearly frequency

## Point 21 (YP)

| Date                     |         | 2018-2019 |
|--------------------------|---------|-----------|
| Aluminium                | cmol(+) | <0.1      |
| Available Phosphorus     | mg/kg   | <5        |
| Calcium                  | cmol(+) | 4.5       |
| Cation Exchange Capacity | cmol(+) | 9.4       |
| Chloride                 | mg/kg   | 35        |
| Conductivity             | dS/m    | 0.06      |
| Magnesium                | cmol(+) | 4.1       |
| Nitrate                  | mg/kg   | 4         |
| Nitrogen - total         | mg/kg   | <500      |
| Organic Carbon           | %       | <0.2      |
| pH                       | pH      | 7.5       |
| Potassium                | cmol(+) | 0.27      |
| Sodium                   | cmol(+) | 0.54      |

## Point 22 (YS)

| Date                     |         | 2018-2019 |
|--------------------------|---------|-----------|
| Aluminium                | cmol(+) | <0.1      |
| Available Phosphorus     | mg/kg   | <5        |
| Calcium                  | cmol(+) | 3.1       |
| Cation Exchange Capacity | cmol(+) | 7.1       |
| Chloride                 | mg/kg   | <10       |
| Conductivity             | dS/m    | 0.03      |
| Magnesium                | cmol(+) | 3.6       |
| Nitrate                  | mg/kg   | 3         |
| Nitrogen - total         | mg/kg   | <500      |

|                |         |      |
|----------------|---------|------|
| Organic Carbon | %       | 0.3  |
| pH             | pH      | 6.4  |
| Potassium      | cmol(+) | 0.26 |
| Sodium         | cmol(+) | 0.18 |

Point 23 (RP)

|                          |         |           |
|--------------------------|---------|-----------|
| Date                     |         | 2018-2019 |
| Aluminium                | cmol(+) | <0.1      |
| Available Phosphorus     | mg/kg   | <5        |
| Calcium                  | cmol(+) | 4.2       |
| Cation Exchange Capacity | cmol(+) | 6.8       |
| Chloride                 | mg/kg   | <10       |
| Conductivity             | dS/m    | 0.04      |
| Magnesium                | cmol(+) | 2.3       |
| Nitrate                  | mg/kg   | 4         |
| Nitrogen - total         | mg/kg   | <500      |
| Organic Carbon           | %       | 0.3       |
| pH                       | pH      | 7.6       |
| Potassium                | cmol(+) | 0.23      |
| Sodium                   | cmol(+) | 0.18      |

Point 24 (RE)

|                          |         |           |
|--------------------------|---------|-----------|
| Date                     |         | 2018-2019 |
| Aluminium                | cmol(+) | 0.1       |
| Available Phosphorus     | mg/kg   | <5        |
| Calcium                  | cmol(+) | 3         |
| Cation Exchange Capacity | cmol(+) | 9.9       |
| Chloride                 | mg/kg   | 40        |
| Conductivity             | dS/m    | 0.06      |
| Magnesium                | cmol(+) | 5.7       |
| Nitrate                  | mg/kg   | <1        |
| Nitrogen - total         | mg/kg   | 700       |
| Organic Carbon           | %       | 0.3       |
| pH                       | pH      | 7.5       |
| Potassium                | cmol(+) | 0.7       |
| Sodium                   | cmol(+) | 0.31      |

Point 25 (LI)

|                          |         |           |
|--------------------------|---------|-----------|
| Date                     |         | 2018-2019 |
| Aluminium                | cmol(+) | <0.1      |
| Available Phosphorus     | mg/kg   | <5        |
| Calcium                  | cmol(+) | 6.1       |
| Cation Exchange Capacity | cmol(+) | 15        |
| Chloride                 | mg/kg   | 20        |
| Conductivity             | dS/m    | 0.09      |
| Magnesium                | cmol(+) | 7.9       |
| Nitrate                  | mg/kg   | 1         |
| Nitrogen - total         | mg/kg   | <500      |
| Organic Carbon           | %       | 0.3       |
| pH                       | pH      | 8.4       |
| Potassium                | cmol(+) | 0.13      |
| Sodium                   | cmol(+) | 0.85      |

Effluent Volume Monitoring - Monitoring Point 2

|                     |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| Year                | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
| Unit of Measure     | kL/day    | kL/day    | kL/day    | kL/day    |
| Frequency           | Daily     | Daily     | Daily     | Daily     |
| No. of measurements | 365       | 365       | 365       | 365       |
| Lowest result       | 0         | 0         | 0         | 0         |
| Mean result         | 9.6       | 7.6       | 28.9      | 49.8      |
| Highest result      | 400       | 400       | 368       | 500       |

SEPS Waste Monitoring - Monitoring Point 5

| Year                | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|---------------------|-----------|-----------|-----------|-----------|
| Unit of Measure     | tonnes    | tonnes    | tonnes    | tonnes    |
| Frequency           | Yearly    | Yearly    | Yearly    | Yearly    |
| No. of measurements | 1         | 1         | 1         | 1         |
| Lowest result       | 0         | 0         | 0         | 0         |
| Mean result         | 120       | 264       | 420       | 180       |
| High result         | 0         | 0         | 0         | 0         |