

FOREST ROAD LANDFILL - YEARLY SUMMARY FOR 2017/18

LICENCE PERIOD: 25th Sept 2017 - 24th Sept 2018

POINT 1 - Surface Water Dam Overflow NOTE: Monitoring Frequency - Special Frequency

| Sample Date | Alkalinity | BOD | Calcium | Chloride | Fluoride | Iron | Magnesium | Manganaese | Nitrate | Ammonia | Oil and Grease | pH | Potassium | Sodium | Sulphate | TOC | Total Phenolics | TSS | Volumetric Flowrate | | |
|-------------|------------|------|---------|----------|----------|------|-----------|------------|---------|---------|----------------|----------|-----------|--------|----------|------|-----------------|------|---------------------|------|-----|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | pH Units | mg/L | mg/L | mg/L | mg/L | ug/L | mg/L | mg/L | mg/L | |
| 8/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 7/09/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 2 - Surface Water Dam NOTE: Monitoring Frequency - Quarterly

| Sample Date | Alkalinity | BOD | Calcium | Chloride | Fluoride | Iron | Magnesium | Manganaese | Nitrate | Nitrite | Ammonia | Oil and Grease | pH | Potassium | Sodium | Sulphate | TOC | Total Phenolics | TSS |
|-------------|------------|------|---------|----------|----------|------|-----------|------------|---------|---------|---------|----------------|----------|-----------|--------|----------|------|-----------------|------|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | pH Units | mg/L | mg/L | mg/L | mg/L | ug/L | mg/L |
| 8/12/2017 | 112 | 13 | 31 | 38 | 0.3 | 0.63 | 8 | 0.20 | 0.1 | <0.1 | 0.3 | <5 | 9.9 | 11 | 27 | 12 | 18 | <50 | 37 |
| 8/03/2018 | 95 | 11 | 123 | 56 | 0.5 | 0.33 | 25 | 0.03 | 5.3 | 2.3 | 0.4 | <5 | 8.8 | 30 | 51 | 35 | 29 | <50 | 92 |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 7/09/2018 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |

POINT 3 - Surface Water - Upstream NOTE: Monitoring Frequency - Special Frequency

| Sample Date | Alkalinity | BOD | Calcium | Chloride | Fluoride | Iron | Magnesium | Manganaese | Nitrate | Ammonia | pH | Potassium | Sodium | Sulphate | TOC | Total Phenolics | TSS | Volumetric Flowrate | |
|-------------|------------|------|---------|----------|----------|------|-----------|------------|---------|---------|----------|-----------|--------|----------|------|-----------------|------|---------------------|-----|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | pH Units | mg/L | mg/L | mg/L | mg/L | ug/L | mg/L | mg/L | |
| 8/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 7/09/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 4 - Surface Water - Downstream NOTE: Monitoring Frequency - Special Frequency

| Sample Date | Alkalinity | BOD | Calcium | Chloride | Fluoride | Iron | Magnesium | Manganaese | Nitrate | Ammonia | pH | Potassium | Sodium | Sulphate | TOC | Total Phenolics | TSS | Volumetric Flowrate | |
|-------------|------------|------|---------|----------|----------|------|-----------|------------|---------|---------|----------|-----------|--------|----------|------|-----------------|------|---------------------|-----|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | pH Units | mg/L | mg/L | mg/L | mg/L | ug/L | mg/L | mg/L | |
| 8/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 7/09/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 5 - Leachate NOTE: Monitoring Frequency - Quarterly

| Sample Date | Alkalinity | BOD | Calcium | Chloride | Fluoride | Iron | Magnesium | Manganaese | Nitrate | Ammonia | Oil and Grease | OC/OP | pH | Potassium | Sodium | Sulphate | TOC | Total Phenolics | TSS |
|-------------|------------|------|---------|----------|----------|------|-----------|------------|---------|---------|----------------|-------|----------|-----------|--------|----------|------|-----------------|------|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | ug/L | pH Units | mg/L | mg/L | mg/L | mg/L | ug/L | mg/L |
| 21/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 7/09/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 6 - Leachate NOTE: Monitoring Frequency - Quarterly

| Sample Date | Alkalinity | BOD | Calcium | Chloride | Fluoride | Iron | Magnesium | Manganaese | Nitrate | Ammonia | Oil and Grease | OC/OP | pH | Potassium | Sodium | Sulphate | TOC | Total Phenolics | TSS |
|-------------|------------|------|---------|----------|----------|------|-----------|------------|---------|---------|----------------|-------|----------|-----------|--------|----------|------|-----------------|------|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | ug/L | pH Units | mg/L | mg/L | mg/L | mg/L | ug/L | mg/L |
| 21/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 7/09/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 7 - Leachate Overflow NOTE: Monitoring Frequency - Quarterly

| Sample Date | Alkalinity | BOD | Calcium | Chloride | Fluoride | Iron | Magnesium | Manganaese | Nitrate | Ammonia | OC/OP | pH | Potassium | Sodium | Sulphate | TOC | Total Phenolics | TSS | VOC |
|-------------|------------|------|---------|----------|----------|------|-----------|------------|---------|---------|-------|----------|-----------|--------|----------|------|-----------------|------|------|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | ug/L | pH Units | mg/L | mg/L | mg/L | mg/L | ug/L | mg/L | mg/L |
| 8/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 7/09/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 8 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

| Sample Date | Aluminium | Arsenic | BOD | Cadmium | Calcium | Chloride | Copper | DOC | Conductivity | Fluoride | Iron | Iron (Dissolved) | Lead | Magnesium | Manganese | Mercury | Ammonia | Nickel | Nox |
|-------------|-----------|---------|-----|---------|---------|----------|--------|-----|--------------|----------|------|------------------|------|-----------|-----------|---------|---------|--------|-----|
|-------------|-----------|---------|-----|---------|---------|----------|--------|-----|--------------|----------|------|------------------|------|-----------|-----------|---------|---------|--------|-----|

| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mS/cm | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | |
|------------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|-----|
| 21/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 9 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

| Sample Date | Aluminium | Arsenic | BOD | Cadmium | Calcium | Chloride | Copper | DOC | Conductivity | Fluoride | Iron | Iron (Dissolved) | Lead | Magnesium | Manganese | Mercury | Ammonia | Nickel | Nox | |
|-------------|-----------|---------|------|---------|---------|----------|--------|------|--------------|----------|------|------------------|------|-----------|-----------|---------|---------|--------|------|-----|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mS/cm | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | |
| 21/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 18 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

| Sample Date | Aluminium | Arsenic | BOD | Cadmium | Calcium | Chloride | Copper | DOC | Conductivity | Fluoride | Iron | Iron (Dissolved) | Lead | Magnesium | Manganese | Mercury | Ammonia | Nickel | Nox |
|-------------|-----------|---------|------|---------|---------|----------|--------|------|--------------|----------|------|------------------|------|-----------|-----------|---------|---------|--------|------|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mS/cm | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| 21/12/2017 | 0.20 | NA | <2 | NA | 117 | 160 | NA | 2 | 1.30 | <0.2 | 0.56 | <0.05 | NA | 11 | 0.08 | NA | <0.1 | NA | 3.9 |
| 8/03/2018 | 0.06 | NA | 2 | NA | 123 | 152 | NA | <1 | 1.30 | 0.2 | 0.16 | <0.05 | NA | 11 | 0.04 | NA | <0.1 | NA | 3.6 |
| 6/06/2018 | 0.06 | NA | <2 | NA | 138 | 155 | NA | <1 | 1.30 | <0.2 | 0.70 | <0.05 | NA | 9 | <0.1 | NA | <0.1 | NA | 3.4 |

POINT 19 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

| Sample Date | Aluminium | Arsenic | BOD | Cadmium | Calcium | Chloride | Copper | DOC | Conductivity | Fluoride | Iron | Iron (Dissolved) | Lead | Magnesium | Manganese | Mercury | Ammonia | Nickel | Nox |
|-------------|-----------|---------|------|---------|---------|----------|--------|------|--------------|----------|------|------------------|------|-----------|-----------|---------|---------|--------|------|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mS/cm | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| 21/12/2017 | 0.07 | NA | <2 | NA | 234 | 432 | NA | 3 | 2.4 | 0.4 | 0.45 | <0.05 | NA | 92 | 0.03 | NA | <0.1 | NA | 5.7 |
| 8/03/2018 | 0.11 | NA | <2 | NA | 232 | 423 | NA | 2 | 2.4 | 0.5 | 0.58 | <0.05 | NA | 90 | 0.03 | NA | <0.1 | NA | 5.7 |
| 6/06/2018 | 0.08 | NA | <2 | NA | 245 | 491 | NA | <1 | 2.4 | 0.4 | 0.20 | <0.05 | NA | 91 | <0.1 | NA | <0.1 | NA | 5.9 |

POINT 20 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

| Sample Date | Aluminium | Arsenic | BOD | Cadmium | Calcium | Chloride | Copper | DOC | Conductivity | Fluoride | Iron | Iron (Dissolved) | Lead | Magnesium | Manganese | Mercury | Ammonia | Nickel | Nox |
|-------------|-----------|---------|------|---------|---------|----------|--------|------|--------------|----------|------|------------------|------|-----------|-----------|---------|---------|--------|------|
| | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mS/cm | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| 21/12/2017 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 8/03/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| 6/06/2018 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

POINT 13 - Methane NOTE: Monitoring Frequency - Quarterly

| Sample Date | Methane %/volume |
|-------------|------------------|
| 8/12/2017 | <0.05 |
| 18/04/2018 | <0.05 |
| 28/06/2018 | <0.05 |

POINT 15 - Methane NOTE: Monitoring Frequency - Quarterly

| Sample Date | Methane %/volume |
|-------------|------------------|
| 8/12/2017 | <0.05 |
| 18/04/2018 | <0.05 |
| 28/06/2018 | <0.05 |

POINT 16 - Methane NOTE: Monitoring Frequency - Quarterly

| Sample Date | Methane %/volume |
|-------------|------------------|
| 8/12/2017 | <0.05 |
| 18/04/2018 | <0.05 |
| 28/06/2018 | <0.05 |

| |
|-------------|
| VOC |
| mg/L |
| DRY |
| DRY |
| DRY |
| DRY |

| |
|-------------|
| VOC |
| mg/L |
| DRY |
| DRY |
| DRY |
| DRY |

| |
|--------------------------------|
| Volumetric Flowrate |
| kL/day |
| DRY |
| DRY |
| DRY |
| DRY |

| | | | | | | | | | | |
|-----------------------|--------------|-----------|-------------------|------------------|---------------|---------------------------|-----------------|------------|------------------------|-------------|
| Oil and Grease | OC/OP | pH | Phosphorus | Potassium | Sodium | Soluble Phosphorus | Sulphate | TOC | Total Phenolics | Zinc |
|-----------------------|--------------|-----------|-------------------|------------------|---------------|---------------------------|-----------------|------------|------------------------|-------------|

