

# Kverneland Group Operations Norway AS

## 1. Outline

|                                    |   |
|------------------------------------|---|
| <b>Address</b>                     | Kverneland Group Operation Norway<br>Orstadveien 62, 4055 Kverneland Norway |
| <b>Number of employees</b>         | 514 (Dec, 2019)   |
| <b>Site area</b>                   | 60,000m <sup>2</sup>  |
| <b>Establishment day</b>           | 1879  |
| <b>ISO14001 certification date</b> | -   |
| <b>Site overview</b>               | Manufacturing of ploughs, cultivators, etc.                                 |



## 2 . Products Main products



Ploughs

## 3 .Environmental policy

1. The Kubota Group aspires to create a society where sustainable development is possible on a global scale.
2. The Kubota Group contributes to the conservation of global and local environments through its environmental friendly operations, products, and technologies.

## 4.Environmental performance data (Jan. 2019 to Dec. 2019)

|                                 |                         |       |
|---------------------------------|-------------------------|-------|
| <b>Used amount of energy</b>    | Crude oil equivalent KL | 9,892 |
| <b>Used amount of water</b>     | thousand m <sup>3</sup> | 23    |
| <b>CO<sub>2</sub> emission*</b> | tons CO <sub>2</sub> e  | 4,369 |

\*CO<sub>2</sub> emissions from energy sources.

| Air Pollutant measurement results         |      |   |               |                  |
|---|------|---|---------------|------------------|
| Main smoke and soot generation facilities |      | No smoke and soot generating facilities |               |                  |
|   | Unit | Control content                         | Control value | Maximum measured |
| SOx                                       | -    | -                                       | -             | -                |
| NOx                                       | -    | -                                       | -             | -                |
| Particulate                               | -    | -                                       | -             | -                |

|   |                         |         |   |
|---|-------------------------|---------|---|
| <b>Amount of discharge water</b>              | thousand m <sup>3</sup> | 11      |   |
| <b>Amount of pollutant in discharge water</b> | COD                     | kg/year | - |
|   | Nitrogen                | kg/year | - |
|   | Phosphorus              | kg/year | - |

| Water pollutant measurement results |                                  |        |               |                  |
|-------------------------------------|----------------------------------|--------|---------------|------------------|
|                                     |                                  | unit   | Control value | Maximum measured |
| Public water areas                  | pH                               | -      | -             | -                |
|                                     | BOD                              | mg/L   | -             | -                |
|                                     | COD                              | mg/L   | -             | -                |
|                                     | Nitrogen                         | mg/L   | -             | -                |
|                                     | Phosphorus                       | mg/L   | -             | -                |
|                                     | Hexavalent chromium              | mg/L   | -             | -                |
|                                     | Lead                             | mg/L   | -             | -                |
|                                     | COD, total emission control      | kg/day | -             | -                |
|                                     | Nitrogen, total emission control | kg/day | -             | -                |
| Phosphorus, total emission control  | kg/day                           | -      | -             |                  |
| Sewerage lines                      | pH                               | -      | 6.2 ~ 9.5     | 8.0, 8.6         |
|                                     | BOD                              | mg/L   | 30            | 10               |
|                                     | COD                              | mg/L   | -             | -                |
|                                     | SS                               | mg/L   | -             | -                |

|                        |      |       |
|------------------------|------|-------|
| <b>Waste discharge</b> | tons | 442   |
| <b>Recycling ratio</b> | %    | 99.6% |
| <b>VOC emission</b>    | tons | 15    |

## 5.Environmental Topics

1. All new lightning equipment use LED lights.
2. Annual analysis of discharge water
3. Energy monitors installed on power hungry equipment
4. Evaporate water from inorganic solvents, to send for recycling.
5. Start up of installing magnet filter on cooling towers to sort out metallic particles (Photo)
6. Paint cans & equipment in Main Assembly stored in environmental and fire-safe container.



## 6.Environmental Communication

1. Promote sorting of waste for recycling (etc. steel, wood, paper, cardboard, plastics).
2. Use 2-sided printing as standard.
3. Digitalization development of factory to reduce paper waste.
4. HSE information on each production information sheet.
5. Safety flash report on Environmental issue cases, with corrective actions to be done