

# DAIRY WASTE WATER POND

## Biological Treatment



### **PREAMBLE:**

Dairy waste water ponds are necessary to collect all waste water used to clean the milking turntable as well as the waiting area where cows assemble this includes all access points used by the cows.

Daily water usage varies with the size of the area and the number of cows milked. Generally, around 20m<sup>3</sup> of water or more may be used.

That waste water drains to the waste water pond where pathogens accumulate as well as all that is associated with cattle waste.

Often a crust is formed on the surface of the pond rendering the pond anoxic.



The waste water is usually used to irrigate fields or sometimes re-used to clean the milking area.

In both cases if the waste water is left untreated, many problems will emerge due to its pathogenic content and smell.

### **ERGOFITO BIO PRODUCTS:**

**Ergofito Ammonfree 10-10-5** is the product required in dairy farms waste water pond to assure natural remediation.

The product is totally safe for animal and human utilization

Please refer to the MSDS available on request

### **DAIRY WASTE WATER TREATMENT PROTOCOL:**

#### **A.) Crust on the surface Dairy Waste Water Pond Remediation Protocol:**

If the dairy waste water pond has formed a crust on its surface, then perform the following:

- 1: Calculate the pond's volume in cubic meters (e.g., 2000<sup>3</sup> liters)
- 2: The dosage is 4 grams of **Ergofito Ammonfree 10-10-5** per cubic meter per day is applied
- 3: Multiply the pond's cubic meters by 4 grams.

#### **Example:**

If the pond is 2000m<sup>3</sup> then multiply 2000 X 0,004 = 8Kg

Therefore, 8Kg of **Ergofito Ammonfree 10-10-5** is required to be applied to the pond per day.

- 4: Mix 8Kg of **Ergofito Ammonfree 10-10-5** with 1000 litres of water. Mix well, then let it stand for a few hours to activate.



5: With a pump, spray the full area of the crust with water or even water from the pond, until the full crust area is wet.

6: Once the crust is wet, spray at least 300 litres of the above **Ergofito Mix** and spray over the full area of the crust.

7: Take 200liters of the above **Ergofito Mix** and spray all around the edges of the pond.

8: Take the remaining 500 litres of the above **Ergofito Mix** and pour it at the pond's inlet.

### **B.) No Surface Crust Dairy Waste Water Pond Remediation Protocol:**

If the pond has no crust, you can use the above protocol. Instead of doing step 5 & 6, apply all the **Ergofito Mix** onto the water's surface.

### **MAINTENANCE:**

Upkeep implies estimating the daily water used to clean the turntable and surroundings in cubic meters.

Once you calculated the daily m<sup>3</sup> usage, multiply by 50grams of **Ergofito Ammonfree 10-10-5**.

### **Example:**

If 20m<sup>3</sup> of water is used daily, mix  $20 \times 50 = 1000\text{grams} = 1\text{Kg}$  of **Ergofito Ammonfree 10-10-5** with 50liters of water.



- 1: Mix water daily usage to clean by 50grams of **Ergofito Ammonfree** (as per example given above).
- 2: Let it stand for a few hours to activate the solution (if possible).
- 3: Spray or pour the milking turntables with half of the above **Ergofito Mixture** uniformly.
- 4: Spray or pour the rest of the above **Ergofito Mixture** in the cow's waiting area in a line or band parallel to the entrance.
- 5: Then wash both the turntable and the waiting area normally ensuring that the **Ergofito** poured line gets pushed by the spraying water all over the entire area.
- 6: All **Ergofito** used will now drain into the waste water ponds and therefore the pond will requiring no further maintenance.
- 7: As the **Ergofito Mix** is applied, all bad smells will abate as well as eliminate any pathogens.

This is due to **Ergofito** natural bacterial activity.

**Please note that after the first week of treatment as per above it may be possible to reduce the Ergofito dosage by 30 to 50%.**



**CONCLUSION:**

Controlling pathogens in waste water is vital for animal health.

**Ergofito** natural biological treatment is efficient and totally safe for all animals.

It is sustainable and excels in the quality of the waste water as well as eliminating odour.

If the dairy has a solids separator before the pond, all solids will also be pathogen and smell free.

[www.advalli.com](http://www.advalli.com)

Please direct any queries to: [cheyne@advalli.com](mailto:cheyne@advalli.com)/ [+27 82 678 0070](tel:+27826780070)