

Our performance Q2 2016

CERMAQ CANADA April – June 2016

In Cermaq Canada we continued to deliver good results on social performance this quarter with no non-compliances and an absence rate of 1.5 percent. Our environmental performance was good, though with one unfortunate incident of fish escape leading to the loss of one fish, and the overall lice situation was positive with successful treatments and counts within regulated levels and less parasitic load than in same quarter last year.

The rolling 12 month fish survival rate was lower in all year classes largely due to environmental concerns (e.g. gill and liver damage from plankton) and mouth rot in some farms. This quarter the use of antibiotics increased compared with the same quarter last year and treatment was primarily for mouth rot and SRS in some farms.

CERMAQ CANADA

INDICATOR	Unit	Q2 2016	Q2 2015	Calendar year 2015
FISH HEALTH				
Survival rate in our fish farming (Atlantic salmon)	12 months rolling rate	91.0%	93.6%	92.8%
Use of antibiotics	gAPI/tonnes harvested	259	4	17.4
Use of treatments against sea lice (in feed)	gAPI/t LWE produced	0.5	0.4	0.3
ENVIRONMENT				
Escapes	Number of fish escapes	1	1	2
Sea lice counts	Average adult female and mobile lice	0.99	1.55	1.70
SOCIAL				
Non-compliances	Number of non-compliances closed with a fine	0	0	0
Absence rate	Absentee days as a % of total work days	1.5%	1.9%	2.1%
Lost time injury rate (H1)	Lost time injuries per million working hours	8.6	0	4.3
Injury frequency rate (H2)	Injuries per million working hours	26	0.0	6.4
Lost time frequency rate (F-value)	Lost time from injuries per million working hours	345	403	189

CERMAQ CHILE April – June 2016

Occupational health and safety performance was very good this quarter in our Chilean operations, with low and stable absence rate of 2.4 percent and low lost time injury rate and injury frequency rate. There were no fish escapes this quarter, however 8 non-compliances were recorded and closed.

In Cermaq, we work continuously to deliver sustainable results on fish health and welfare, environmental issues and social impacts of our operations to achieve long term value creation. Regarding fish health, there are some sustainability challenges that are prevailing and that Cermaq and the industry is working to solve, including concrete challenges associated with *Piscirickettsia salmonis* the agent that causes *Piscirickettsiosis* (SRS) in Chile.

This quarter SRS remained a challenge, but affected the survival rate less compared with the same period last year. However, we had a substantial increase in our measure of antibiotic use due to sanitary challenges due to persistent SRS outbreaks in farming sites in the 11th region.

Cermaq has a strong commitment to finding a sustainable solution for SRS, which currently can mainly be managed by not fully efficient vaccination and controlled by the use of antibiotics. For the last five years Cermaq’s R&D team has worked actively with industry and academic partners to develop new and effective vaccines to fight SRS, promote vaccine innovation and proper use of them. This quarter, Cermaq, together with seven other industry partners including feed and pharmaceutical companies, launched the Pincoy program which aims to reduce the antibiotics use in the Chilean industry by 50 percent the next two years through a holistic approach to combat SRS.

The 12 month rolling survival rate for Atlantic salmon decreased from 92.8 percent in Q2 2015 to 91.8 percent this quarter. The rolling survival rate for Coho salmon decreased this quarter compared to Q2 2015 mainly due to the effects of the harmful algae bloom. After the algae bloom events, the stocking process of Coho salmon has resumed, and the use of oral vaccination for SRS was scheduled with the aim to improve fish immunity. The Trout survival rate decreased as well, from 93.4% in Q2 2015 to 88.8% this quarter. The main cause was SRS in one farming site in the 11th region. Cermaq Chile will continue to work on initiatives to reduce SRS during the farming stage, by encouraging the development of new vaccines prototypes, development of novel vaccination strategies and the use of these vaccines in Cermaq Chile sites.

Use of sea lice treatments increased this quarter mainly due to higher sea lice counts. This Chilean autumn was in particular a very challenging season; water temperatures were higher than previous years which facilitate the sea lice growth. Also this autumn was drier than usual and ocean salinity increased, contributing to favorable conditions for lice development. For the past 3 years, Cermaq Chile has worked on preventive and non-pharmaceutical tools to control sea lice on their own farming sites. The sea lice challenge is also being addressed by an industry initiative where Cermaq Chile is a member, with the aim to research and develop the use of a Chilean Cleaner fish.

CERMAQ CHILE				
INDICATOR	Unit	Q2 2016	Q2 2015	Calendar year 2015
FISH HEALTH				

Survival rate in our fish farming (Atlantic salmon)	12 months rolling rate	91.8%	92.8%	94.0%
Survival rate in our fish farming (Coho)	12 months rolling rate	92.8%	95.5%	91.5%
Survival rate in our fish farming (Trout)	12 months rolling rate	88.8%	93.4%	97.5%
Use of antibiotics	gAPI/tonnes harvested	1527	604	376
Use of treatments against sea lice (bath)	gAPI/t LWE produced	17.45	2.19	4.46
ENVIRONMENT				
Escapes	Number of fish escapes	0	77	6844
Sea lice counts	Average adult female lice (Caligus)	1.56	1.30	1.41
SOCIAL				
Non-compliances	Number of non-compliances closed with a fine	7	0	9
Absence rate	Absentee days as a % of total work days	2.4%	2.3%	2.2%
Lost time injury rate (H1)	Lost time injuries per million working hours	4.3	6.1	5.4
Injury frequency rate (H2)	Injuries per million working hours	5	8	8.6
Lost time frequency rate (F-value)	Lost time from injuries per million working hours	146	69	89

CERMAQ NORWAY April – June 2016

The occupational health and safety performance was good this quarter in Cermaq Norway. Absence was 4.9 percent, which is a decrease from 5.5 percent in the same period last year. The lost time injury rate was 13 compared with 15 in Q2 2015. There were no non-compliances this quarter and no fish escapes.

In terms of environmental performance, sea lice counts were well below the regulatory limit of 0.5 average adult female lice per fish and counts were lower than the same period last year. In Nordland,

counts were low this quarter due to the implementation of preventive measures such as lice skirts and several sites with lumpfish. Spring delousing treatments were performed in farming sites. Six bath treatments with hydrogen peroxide were conducted in Finnmark and one treatment was conducted in Nordland. Development of preventive measures will be escalated further.

Fish survival was somewhat inferior than in the same period last year, with a rolling survival rate of 92.2 percent this quarter. The decrease is mainly due to common heart related disorders like HSMI and CMS in several farms in Finnmark. Cermaq Norway performed voluntary culling this quarter in sites most affected by the disease. Besides this event, the sanitary condition was good.

Antibiotics use by closed cycles in Q2 2016 was low and amounted to 4.4 grams active ingredient per ton harvest. Treatments were delivered to control a disease caused by *Tenacibaculum finnmarkense*. Following the identification of this bacteria, Cermaq's R&D team is working on novel solutions to control this disease.

CERMAQ NORWAY				
INDICATOR	Unit	Q2 2016	Q2 2015	Calendar year 2015
FISH HEALTH				
Survival rate in our fish farming (Atlantic Salmon)	12 months rolling rate	92.2%	96.5%	93.8%
Use of antibiotics	gAPI/tonnes harvested	4.4	0.0	4.6
Use of treatments against sea lice (in bath)	gAPI/t LWE produced	1.1	1.1	2.7
ENVIRONMENT				
Escapes	Number of fish escapes	0	0	500
Sea lice counts	Average adult female lice	0.07	0.02	0.07
SOCIAL				
Non-compliances	Number of non-compliances closed with a fine	0	2	2
Absence rate	Absentee days as a % of total work days	4.9%	5.5%	5.4%
Lost time injury rate (LEI)	Lost time injuries per million working hours	13	15	11.0

Injury frequency rate (H2)	Injuries per million working hours	18	20.0	21.9
Lost time frequency rate (F-value)	Lost time from injuries per million working hours	146	69	521

How each indicator is measured

Fish health

Fish survival: The welfare status of farmed fish is of interest to a range of industry stakeholders. In Cermaq, we continuously strive to improve fish welfare through a range of measures and initiatives.

Survival can be used as one simple measure to gain an overview of the fish health situation. The indicator is a rolling 12 month measure which calculates survival number for the last 12 months as a proportion of the estimated number of fish in the sea in the last 12 month of the year (adjusted for harvest and mortalities). This is to adjust for short term variations and to enable to show longer term trends.

Antibiotic use: Medicines is a necessary tool in all kinds of animal farming to ensure animal welfare. In salmon farming, some geographical regions or companies have been able to significantly reduce their use of antibiotics over time, whilst others are relatively high users. This measure is useful to gain an overview and control of the antibiotics use in the operations, and ensure that our antibiotic policy is adhered to. We measure the total use of antibiotics divided on the biomass harvested within a quarter. We have chosen this measure as we consider that it gives the best indication of the sustainability of our production and product safety. Also this measure gives a good relation between antibiotic use and stock treated by period and provides better association between treatments and final products.

In Cermaq it is important that antibiotic treatments are held to a minimum, only when strictly needed to restore fish health and welfare. Our policy for the use of antibiotics is to limit the use to cases where:

- Animal welfare is threatened by a bacterial disease
- A diagnosis of disease exist with a prescription of antibiotic by an authorized person
- The antibiotic has a proven therapeutic effect against the disease, and
- The antibiotic is approved for use in fish farming

Sea lice treatment: This indicator seeks to quantify the amount of different types of sea lice treatment used by Cermaq. Bath treatments and in-feed treatments are included in the indicator,

where the most significant by region is published. Preventive methods are not included in the reporting; only treatments to ensure that sea lice levels are in compliance with regulatory set limits. A summary of non-pharmaceutical and preventive measures used in Cermaq, can be seen [here](#). In Canada, only treatment in feed is used, while in Norway and Chile, bath treatments are most common are hence reported here. Treatments with hydrogen peroxide is not included in this figure.

Escapes: Our goal in Cermaq is zero escapes. Escapes may pose negative effects through possible interaction between the escaped salmon and wild salmon including the risk of compromising genetic integrity and increase competition in the freshwater environment. For fish farmers, escapes also represent a loss of valuable assets. Preventing escapes is a high priority and in the case of any incidents of escape, we work intensively to recapture as many fish as possible. This indicator aims to quantify the number and extent of fish escape incidents and what action has been taken to prevent recurrence, to minimize the risk of similar incidents in the future.

Environment

Sea lice counts: Sea lice represent a continuing challenge across operations in many regions. Control of sea lice in a sustainable way is critical to the future sustainability and growth of the salmon farming industry. We are therefore closely monitoring the sea lice counts in each region to gain an overview of the lice situation in Cermaq. Counts are made for each site, and the number reported here represents an average of each Cermaq operating company. The lice counting for each country is linked to the sea lice levels triggering treatment in the different salmon farming areas.

Non-compliances: Our clear goal is to comply with all applicable laws and regulations in our countries of operation. The level of any non-compliances within our operating companies also helps indicate our ability to ensure that operations conform to expected performance parameters. From an economic perspective, ensuring compliance helps to reduce financial risks that occur either directly through fines or indirectly through impacts on reputation. This indicator seeks to measure the compliance with environmental, social, and product regulations in our operations. It refers to final non-compliances closed with a fine.

OHS

Cermaq employees shall be safe and secure at work. Occupational health and safety initiatives are integral parts of the Group's risk management. The OHS challenges are differing between the operating companies. Each operating company identifies its own relevant and suited initiatives to reduce the level of injuries and absence due to illness. Operating companies also engage regularly in the sharing of best practices to manage and mitigate common challenges, including the definition and measurement of a set of common OHS indicators reported monthly to the management.

Absence rate: This indicator measures absence related to employees' health including sickness, lost time from injuries (at work or outside work), or occupational disease.

Lost time injury rate (H1): This indicator measures injuries among our employees that lead to lost time direct per million working hours.

Injury frequency rate (H2): This indicator measures the total number of injuries among our employees per million working hours.

Lost time frequency rate (F-value): This indicators measures lost time from injuries among our employees per million working hours.