

Our performance Q4 2016

CERMAQ CANADA October-December 2016

In Cermaq Canada we continued to deliver good results on social performance this quarter with no non-compliances, an absence rate of 1.9 percent and zero lost time injuries. Our environmental performance was good with no fish escapes, and the overall lice situation was positive with no sea lice treatments performed, and sea lice counts kept below regulatory limits.

The rolling 12 month fish survival rate was lower compared with the same period last year largely due to environmental challenges, including higher water temperatures and mouth rot in some farms. Due to these challenges, during this quarter the use of antibiotics increased compared with the same quarter last year and treatment was primarily for SRS. Currently there are no commercially available SRS vaccines in Canada. Cermaq Canada is actively engaged in both the research community and government to better understand the Canadian SRS situation and to expedite vaccine development and licensing. On a positive note, after a long period of elevated sea water temperatures, the temperatures are now back to normal level, which has led to a decrease in SRS presence in several sites.

INDICATOR	Unit	Q4 2016	Q4 2015	Calendar year 2015
FISH HEALTH				
CERMAQ CANADA Survival rate in our fish farming (Atlantic	12 months rolling rate	91.7%*	92.8%	92.8%

raising (Atlantic salmon)

Use of antibiotics	gAPI/t harvested	187	56	17
Use of treatments against sea lice (in feed)	gAPI/t LWE produced	0.0	0.3	0.3

ENVIRONMENT

Escapes	Number of fish escaped	0	0	2
Sea lice counts	Average adult female and mobile lice	0.93*	1.04	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	1.9%	1.6%	2.1%
Lost time injury rate (H1)	Lost time injuries per million working hours	0	16.7	4.3
Injury frequency rate (H2)	Injuries per million working hours	28	17.0	6.4
Lost time frequency rate (F-value)	Lost time from injuries per million working hours	0	58	189

*Fish survival rate and sea lice counts were edited after auditing process in March 2017.

CERMAQ CHILE October – December 2016

Occupational health and safety performance was good this quarter in our Chilean operations, with low and stable trends for absence rate and injury frequency rate, however with a somewhat higher lost time injury rate compared with the same quarter last year. Two final non-compliances were recorded and closed during this quarter. The environmental performance was good, with no fish escapes and sea lice counts were lower than in the same period last year.

In Cermaq, we work continuously to deliver sustainable results on fish health and welfare, environmental performance 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.

SRS is an industry wide threat and this burden is a constant challenge and the main cause of fish mortalities in Chile. Our fish survival rates were better this quarter for Coho salmon compared with the same period last year. However, our survival rate decreased for Atlantic salmon and Trout, due to SRS outbreaks, low performance fish and predator attacks. The 12 month rolling survival rate for Atlantic salmon decreased from 94.0 percent in Q4 2015 to 91.3 percent this quarter. The Trout survival rate decreased significantly, from 97.5 percent in Q4 2015 to 84.7 percent. The main reason for this was an SRS outbreak in one farming site in the 11th region which occurred several months ago. The rolling survival rate for Coho salmon improved 4 percent compared to the same period last year, mainly due to good sanitary conditions.

This quarter we had a substantial increase in our measure of antibiotic use due to sanitary challenges because of persistent SRS outbreaks in farming sites in the 10th and 11th region. Cermaq has a strong commitment to finding a sustainable solution for SRS, which currently can be partially controlled by traditional vaccination and managed 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. Last quarter, Cermaq, together with seven other industry partners including fish 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. 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.

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

For comparison, the amount of antibiotics used in Cermaq's operations the past three years can be found in our annual reports.

With regard to parasitic loads, summer season is typically the most challenging time of year. Despite this, Cermaq Chile achieved lower parasitic loads with lower use of lice treatment this quarter. 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	Q4 2016	Q4 2015	Calendar year 2015
FISH HEALTH				
Survival rate in our fish farming (Atlantic salmon)	12 months rolling rate	91.3%	94.0%	94.0%
Survival rate in our fish farming (Coho)	12 months rolling rate	95.5%	91.5%	91.5%
Survival rate in our fish farming (Trout)	12 months rolling rate	84.7%	97.5%	97.5%
Use of antibiotics	gAPI/t harvested	554	376	376.0
Use of treatments against sea lice (bath)	gAPI/t LWE produced	3.80	4.69	4.46
ENVIRONMENT				
Escapes	Number of fish escaped	0	0	6844
Sea lice counts	Average adult female lice (Caligus)	0.77	1.37	1.41
SOCIAL				
Non-compliances	Number of non-compliances closed with a fine	2	7	9
Absence rate	Absentee days as a % of total work days	1.8%	2.1%	2.2%
Lost time injury rate (H1)	Lost time injuries per million working hours	9.2	6.1	5.5
Injury frequency rate (H2)	Injuries per million working hours	10	9	9
CERMAQ CHILE				

CERMAQ NORWAY October– December 2016

The occupational health and safety performance was good this quarter in Cermaq Norway. Absence decreased to 4.9 percent compared with 5.2 percent in the same period last year. There were no non-compliances this quarter and a low lost time injury rate of 4.

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. Lice counts were low this quarter largely due to the implementation of preventive measures such as lice skirts and several sites with cleanerfish. Delousing treatments were also performed in farming sites. Development of preventive measures will be escalated further.

There was one escape incident in December during a delousing treatment, leading to a loss of 400 fish. Nets to catch the escaped fish were put out immediately and 24 fish were recovered. The rolling fish survival rate was stable compared with the same period last year, with a rolling survival rate of 94.5 percent this quarter.

This quarter there was some antibiotic use by closed cycle due to some challenges with mouth rot (*Tenacibaculum finnmarkense*) in one farming site. The antibiotic was used in 2015 and the use is accounted at the moment of harvest which concluded in Q4 2016. Cermaq's R&D team is working on new solutions to control this disease in partnership with a vaccine supplier.

CERMAQ NORWAY

INDICATOR	Unit	Q4 2016	Q4 2015	Calendar year 2015
FISH HEALTH				
Survival rate in our fish farming (Atlantic Salmon)	12 months rolling rate	94.5%	93.8%	93.8%
Use of antibiotics	gAPI/t harvested	0,4	0	4.6
Use of treatments against sea lice (in bath)	gAPI/t LWE produced	1.0	6.1	2.7
ENVIRONMENT				
Escapes	Number of fish	400	0	500

escape

Sea lice counts	Average adult female lice	0.09	0.13	0.07
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SOCIAL

Non-compliances	Number of non-compliances closed with a fine	0	0	2
Absence rate	Absentee days as a % of total work days	4.9%	5.2%	5.4%
Lost time injury rate (H1)	Lost time injuries per million working hours	4	12	11.0
Injury frequency rate (H2)	Injuries per million working hours	4	36.0	22.0
Lost time frequency rate (F-value)	Lost time from injuries per million working hours	8	641	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.
