November 18, 2016

Mr. Jose Batista Junior
Interim Chief Executive
JBS S/A
Av. Marginal Direita Do Tiete 500
Sao Paulo, Sao Paulo, 05118-100 Brazil
+55-1131444107

CC: Corporate Secretary, Head of Investor Relations, Head of Sustainability/CSR

Subject: International Investor Concern on Water Risk Oversight, Request for Water Stewardship Policy

We, the undersigned group of interested investors and debt holders, with over $1.2 trillion in combined assets under management, are writing to ask JBS S/A, the largest meat processing company in the world, to undertake a risk assessment of the company's impacts on water quality, and to adopt and implement a comprehensive water stewardship policy designed to reduce these risks. As investors analyzing water risks in our portfolios, we believe that robust management of water quality challenges is a critical aspect of risk management in the meat industry, and one of increasing importance in the context of climate change and growing weather extremes.

At the global level, the World Economic Forum's *2015 Global Risk Report* ranked water as the top societal risk facing the world in terms of potential economic impact. And according to the CDP, 43% of companies from the consumer staples sector globally cite water risk as having had "material and detrimental impacts" on their businesses in the last year. [1],[2]

Water quality impacts and risks can be significant for meat companies across the value chain – from animal production to the slaughtering and processing stages. In addition, the feed purchased for hogs, cattle and poultry, of which corn is typically a primary ingredient, also has a significant water quality footprint linked to fertilizer run-off.

The agricultural sector is the greatest source of nutrient pollution to global freshwater supplies and it is estimated that industrial livestock operations produce 1 billion tons of phosphorous and nitrogen-rich waste annually in the United States.[3] In the U.S., this contributes to poor water quality conditions in 145,000 miles of rivers and streams, nearly 1 million acres of lakes, reservoirs and ponds, and more than 3000 square miles of bays and estuaries.[4] It is estimated that these impacts contribute to an annual loss of $82 million to the restaurant, tourism and seafood industries alone.[5]

Water pollution incidents resulting from inadequately managed waste storage and disposal controls from meat production can also pose significant risks to local communities and their right to clean water. The Human Right to Water, formally recognized by the United Nations in 2010, clarifies that it is the responsibility of companies to ensure their operations do not infringe upon

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[1] "Insight Report, Global Risks 2015: 10th Edition." *World Economic Forum,* Figure 1
http://www3.weforum.org/docs/WEF_Global_Risks_2015_Report15.pdf
[2] "Accelerating Action: CDP Global Water Report 2015," *CDP,* October 2015, pg. 11
https://www.cdp.net/en/reports/archive
[3] "Nutrient Pollution: Impacts on the Nation." Infographic. *United States Environmental Protection Agency (EPA).* 2013.
[4] "Corporate Agribusiness and the Fouling of America's Waterways." *Environment America*, June 2016, pg. 7
[5] "Big Agriculture choking our waterways." *Sun Sentinel*. August 8, 2016.

the right of individuals to sufficient, safe, acceptable and physically accessible and affordable water. This human right is further buttressed by the UN's Sustainable Development Goal 6, which includes a target for improving water quality by reducing pollution and minimizing the release of hazardous chemicals.

Climate change makes managing water quality risks even more challenging. The recent Hurricane Matthew-induced flooding of hog and poultry operations in North Carolina and related pollution events are only the most recent example of how extreme weather events can further exacerbate the reputational, legal and litigation risks associated with the industry's impacts on water quality.[6]

We recognize that JBS S/A has undertaken an analysis of water quantity risks facing its direct operations, and has accordingly set operational water conservation reduction goals. We also recognize that JBS Brazil created a Sustainable Water Management Program in 2015, the priorities of which include identifying operational units in critical watersheds and establishing reduction targets for water consumption.[7] However, targets for improvement or preservation of water quality are not mentioned in this document. We therefore ask the company to assess water quality-related risks associated with the company's direct operations as well as in its supply chain (including contract growers and feed suppliers), and develop a comprehensive water stewardship policy with related goals that address the following water risks:

Operational Water Quality Risks

Noncompliance
JBS S/A has paid substantial fines due to past water quality violations. In 2010, JBS settled with the United States' Department of Justice, paying $2 million over the failure of a facility to comply with the Clean Water Act and the Pennsylvania Clean Streams Law. The facility was charged with dumping pollutants into Skippack Creek, a tributary of the Perkiomen Creek and the Schuylkill River over a five-year period, which according to the U.S. Attorney's Office caused major fish kills in Pennsylvania waterways. The agreement also required JBS to improve operations by reconstructing wastewater systems, at an estimated cost of $6 million.[8]

Opportunities to Minimize Wastewater Discharge
According to a June 2016 report by Environment America, JBS and its subsidiaries released 37.6 million pounds of toxic pollutants into U.S. waterways between 2010 to 2014 and 6.9 million pounds in 2014 alone, making JBS the 9th overall in volume of toxic discharges of parent companies in the US for that year.[9] Many of these discharges took place in impaired watersheds such as the Suwannee River in Florida. Given the reputational, litigation and regulatory risks of being a large polluter, and in light of JBS' recent acquisition of Cargill's pork operations, we would like to understand how JBS S/A and its subsidiaries are working to further minimize effluent discharge beyond compliance levels, and what related goals and targets have been set. This is of particular interest for JBS S/A facilities discharging into significantly impaired watersheds, and to iconic watersheds such as the Buffalo National River, named the nation's first National River by an act of Congress in 1973, on which C&H Hog Farm is located.

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[6] *"Millions of North Carolina chickens die in Hurricane Matthew floods: state."* Reuters, October 2016. http://www.reuters.com/article/us-storm-matthew-poultry-idUSKCN12C2J6
[7] JBS Annual and Sustainability Report. 2015.
[8] "JBS to Pay $2 Million in PA Water Pollution Case." Food Safety News. June 21, 2010. http://www.foodsafetynews.com/2010/06/jbs-usa-and-the-department/#.V92SLZMrJE4
[9] "Corporate Agribusiness and the Fouling of America's Waterways." *Environment America*, June 2016, pg 2.

Animal Waste Management
JBS S/A owns animal operations and procures beef, poultry, hogs and other livestock through a network of suppliers and contract growers. Due to the company's footprint, these animals account for millions of tons of manure a year. Therefore, for both owned and contracted animal operations, we seek to understand how comprehensively the company monitors and addresses the water quality risks associated with manure storage (e.g. technical specifications and standards for anaerobic treatment lagoons, storage sheds, etc.) and with the application of animal manure to farm fields, particularly in the context of growing risks associated with an increase in extreme precipitation events.

Minimizing Fertilizer Runoff from Feed Growers
Runoff from the acres of crops needed to feed livestock is a major source of pollution in U.S. and global waters like the Chesapeake Bay and Gulf of Mexico. In particular, nitrogen run-off from cornfields - the major ingredient in animal feed - is the single largest source of nutrient pollution to the Gulf of Mexico's "dead zone," an area the size of Connecticut that is essentially devoid of life.[10] As a member of Field to Market, JBS has the opportunity to more proactively address these impacts by working directly with feed suppliers, measuring grower environmental performance using the Field to Market Fieldprint Calculator and promoting practices such as fertilizer optimization, use of cover crops and extending crop rotations. However, to date, we do not see evidence that JBS is using its membership in Field to Market to advance these objectives.

As concerned investors and debt holders, we recognize the company may be developing robust water-risk assessment strategies and related policies that address our concerns, but we seek increased disclosure on these issues. Therefore, we ask JBS S/A to:

- Assess its water quality-related risks, including wastewater discharge from processing facilities, manure management practices of owned animal operations and contract animal operations, as well as fertilizer run-off pollution associated with feed production and;
- Adopt and implement a comprehensive water stewardship policy designed to reduce these risks that would include requirements for leading practices for nutrient management and pollutant limits; financial and technical support to help implement the policy; robust and transparent measures to prevent water pollution incidents; specific time-bound goals to ensure conformance with the policy. This policy should apply company-wide with performance standards for direct operations and suppliers.
- Produce a transparent mechanism to regularly disclose progress on adoption and implementation of the policy. We recognize that JBS S/A has responded to CDP's water questionnaire for several years, providing a standardized review of water in direct operations, supply chain, and governance. We encourage JBS S/A to continue responding to CDP's water questionnaire in 2017 with updated information on the above areas.

[10] "Water and Climate Risks Facing U.S. Corn Production: How Companies and Investors Can Cultivate Sustainability." *Ceres*. June 2014.

We realize these are complex issues and welcome the opportunity to meet with you to discuss our requests in more detail. Marcela Pinilla, Senior Analyst at Christian Brothers Investment Services, Inc. (CBIS) is coordinating this investor engagement. Please reach out to her at mpinilla@cbisonline.com by **November 30th, 2016**.

Thank you for your leadership on these issues. We value your time and look forward to hearing from you in the coming weeks.

Sincerely,

ACTIAM

Portfolio Advisory Board, Adrian Dominican Sisters

Aegon Asset Management

AP7

As You Sow

Benedictine Sisters of Mount St. Scholastica

BMO Global Asset Management (EMEA)

Calvert Investments

CBIS

Christopher Reynolds Foundation

Congregation of Holy Cross, Moreau Province

Congregation of Sisters of St. Agnes

Dana Investment Advisors

Daughters of Charity, Province of St. Louise

Dignity Health

Domini Social Investments LLC

Franciscan Sisters of Allegany NY

Fresh Pond Capital wholly owned subsidiary of Reynders, McVeigh Capital Management, LLC

GES

Green Century Capital Management

Inflection Point Capital Management

Kempen Capital Management

Mercy Health

Mercy Investment Services

Midwest Coalition for Responsible Investment

Miller/Howard Investments, Inc.

Park Foundation

Pax World Management LLC

PGGM

Province of St. Joseph of the Capuchin Order

Robeco

Seventh Generation Interfaith CRI

Sisters of Bon Secours USA

Sisters of Charity of Nazareth

Sisters of Charity of New York

Sisters of Charity, Halifax

Sisters of Saint Joseph of Chestnut Hill, Philadelphia, PA

Sisters of St. Francis of Philadelphia

Sisters of the Presentation of the BVM

Social Justice Committee, UU Congregation at Shelter Rock

Sonen Capital

Trillium Asset Management

Trinity Health

UAW Retiree Medical Benefits Trust