Reviewed 11 Nov 2020

## **Water-Related Internal Governance**

The Inghams Murarrie Plant Manager has overall accountability for water stewardship on the site. Production Supervisors are responsible for the use of water and discharge of wastewater in their areas of responsibility. The Advanced Water Treatment Plant Operators control the operation of the wastewater treatment plant and its discharge to trade waste. The Health, Safety and Environmental Manager monitors compliance to water related laws and regulations and manages relationships with external stakeholders.

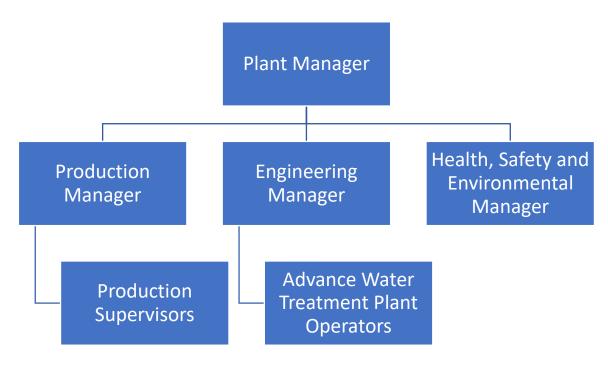


Figure 1: Water- related internal governance

## <u>Summary of Water Stewardship Plan Progress and Effort to Address Shared Water Challenges – Ingham's Murarrie 2018-</u> <u>20</u>

Water Stewardship Plan Objective	SMART Target	Metric(s)	Action	Progress Status
Improve water intensity	Improve water recycling to minimise water consumption and trade waste production	Maximise AWTP performance exceeding 65% recovery of incoming site wastewater	De-sludge anaerobic pond to increase retention time and available volume.  Monitor and report performance	De-sludge completed, now regular maintenance required.
	Improve water recycling to minimise mains water consumption and trade waste production	Daily target of AWTP to Tanks > 3.5 mega litres	Improve water quality in SBR to allow quicker through put to AWTP.  Monitor and report performance	80%
	Use less water per Bird processed.	Achieve site KPI of 16- 17.5 L/Bird for average of 6 months.	Modify controls of pipe work for Mains and AWTP in ceiling for better control.  Refer Recommendations in Gemms report.	Completed achieved 15.3 L/B average for FY19- 20.
	Amendments to site Environmental (EPPR00405713) and Trade Waste Licence (9823) QUU.	Meet with Regulator and submit changes.	Gain approval to treat RO waste water through site ponds 3-8.	Completed AWTP wash water going to site ponds.
Minimise impacts to Brisbane River and Moreton Bay	Reduce Nitrogen levels in trade waste to Gibson Island AWTP.	Decrease levels from average quarterly load of 5000kg to < 2000kg/ quarter	De-sludge anaerobic pond and implement "Single Cell Protein from purple Phototrophic bacteria" project in waste water line of site.	BOD in trade waste reduced by 80%. UQ Field Project increased to large reactor
Maintain a healthy grass and wetland environment on lease.	Improve the health of vegetation and fauna	Improvements in Water quality and volume of each pond	Connect ponds 3-8 on the pond system project the allow water flow of 4 mega litres/ wk. Review site vegetation management plans in consultation with B4C	Completed, all ponds now connected and maintaining capacity.

Water Stewardship Plan Objective	SMART Target	Metric(s)	Action	Progress Status
Improve water security for site	Secure portable water for hygiene and sanitary needs during mains outage.	Ensure potable water available for site usage for 48hrs.	Install 3 mega litre tank between QUU meter and site factory inlet. (Not approved this FY). Installing pipe work to be able to redirect AWTP water to amenities in time of outage.	10%
Contribute to improved Catchment Governance	Cooperate with local stakeholder groups to improve Bulimba creek and Lower Brisbane Catchment	Proactive involvement to assist with achievements of Bulimba Creek and Lower Brisbane catchment.	Meet with B4C, Port of Brisbane and other local groups to share Site's WSP.	Reported actions completed at B4C Annual General meeting 13/11/20.
Contribute to Traditional Owners Culture and Values	Introduction of Yellow Belly Bass	Sustain water quality to introduce Yellow Belly Bass	Improve water quality in pond 8 using floating grass islands. Test water and introduce bass.	Feeder fish have been introduced to ponds July 2020. Jan21 hoping to place Bass in ponds.
Reuse AWTP Waste Water	Redirect all AWTP Trade Waste	0 litres going to QUU.	Redirect 4 Mega litres / wk to the pond system 3-8. Pump clean water to site for use in Truck wash, Red area create wash, amenities, SBR, AWTP.	Completed with redirection. Next capital project install reuse tank.
Contribute to Traditional Owners Culture and Values	Meet with representatives on Traditional owners families.	Further understand the culture and spiritual values of the Site IWRA.	Meet with, discuss and agree on the Indigenous water related challenges. Develop actions to include in this plan.	100%
Indirect Water Usage of Contractors	Collect data on contractors for water	View Envizi for completion	State Farming Managers to ensure all contractor farms are using Envizi.	100%