

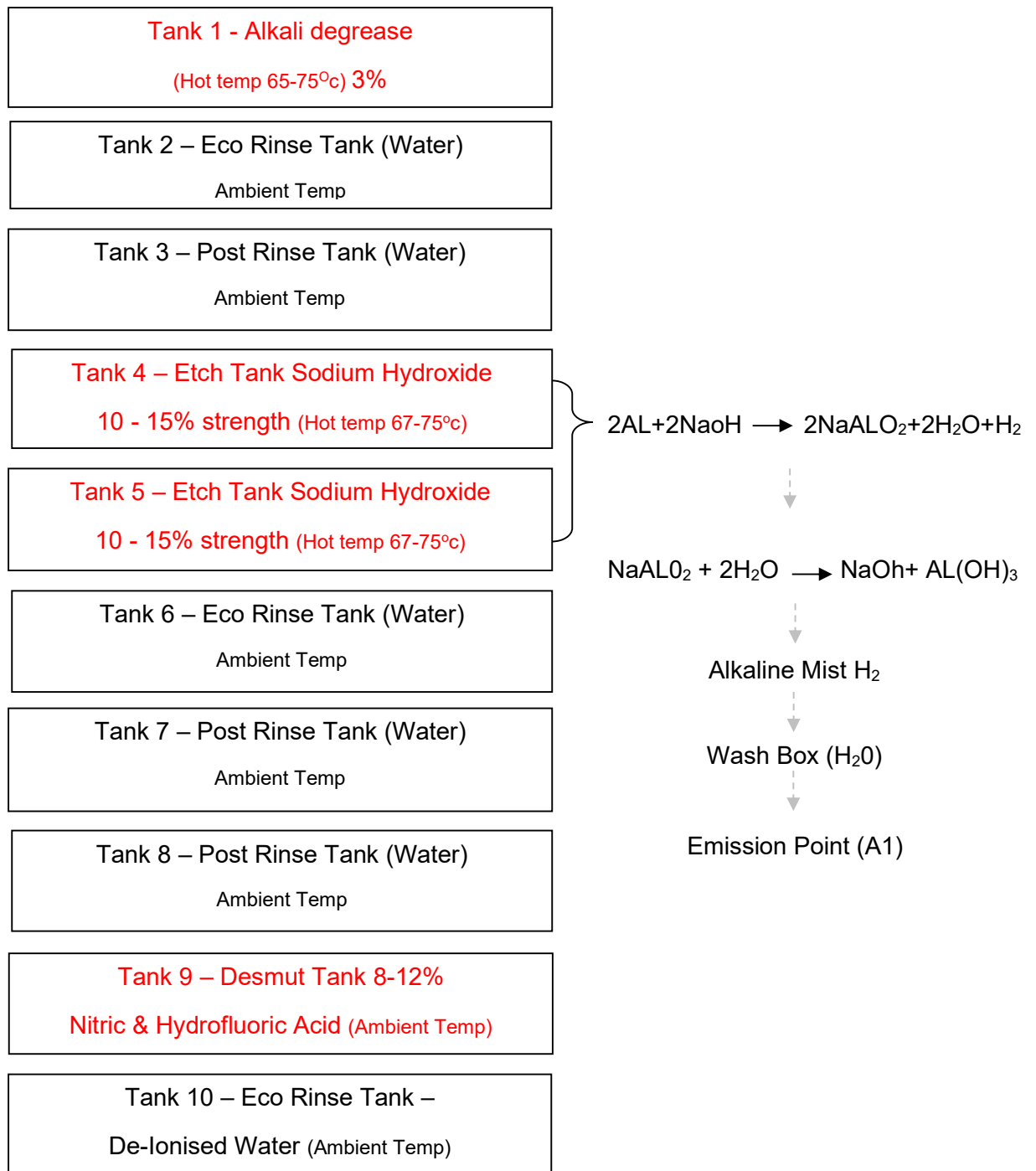
Abatement System -emissions to air

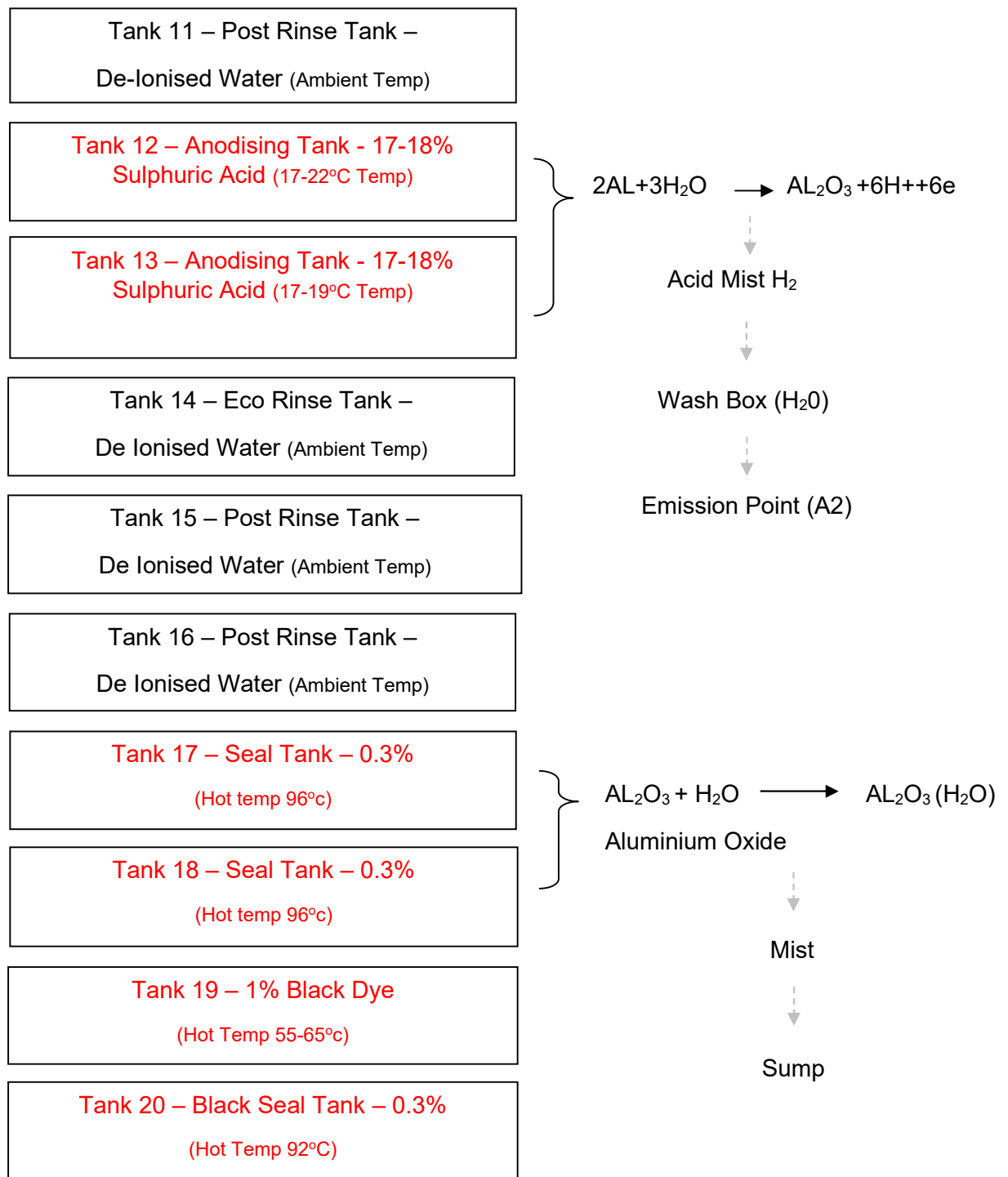
This document provides details of the abatement systems for emissions to air at Lotus Car’s anodising site in Wellingborough.

Overview

The installation is a 20 stage anodising facility. Emissions to air are generated as a result of fume extraction of critical process stages. The air is extracted from the Sulphuric acid and Sodium Hydroxide treatment tanks via local exhaust ventilation from the top of the process tanks in the form of lip extraction and then sent into a wash box scrubber where contaminants are captured in water.

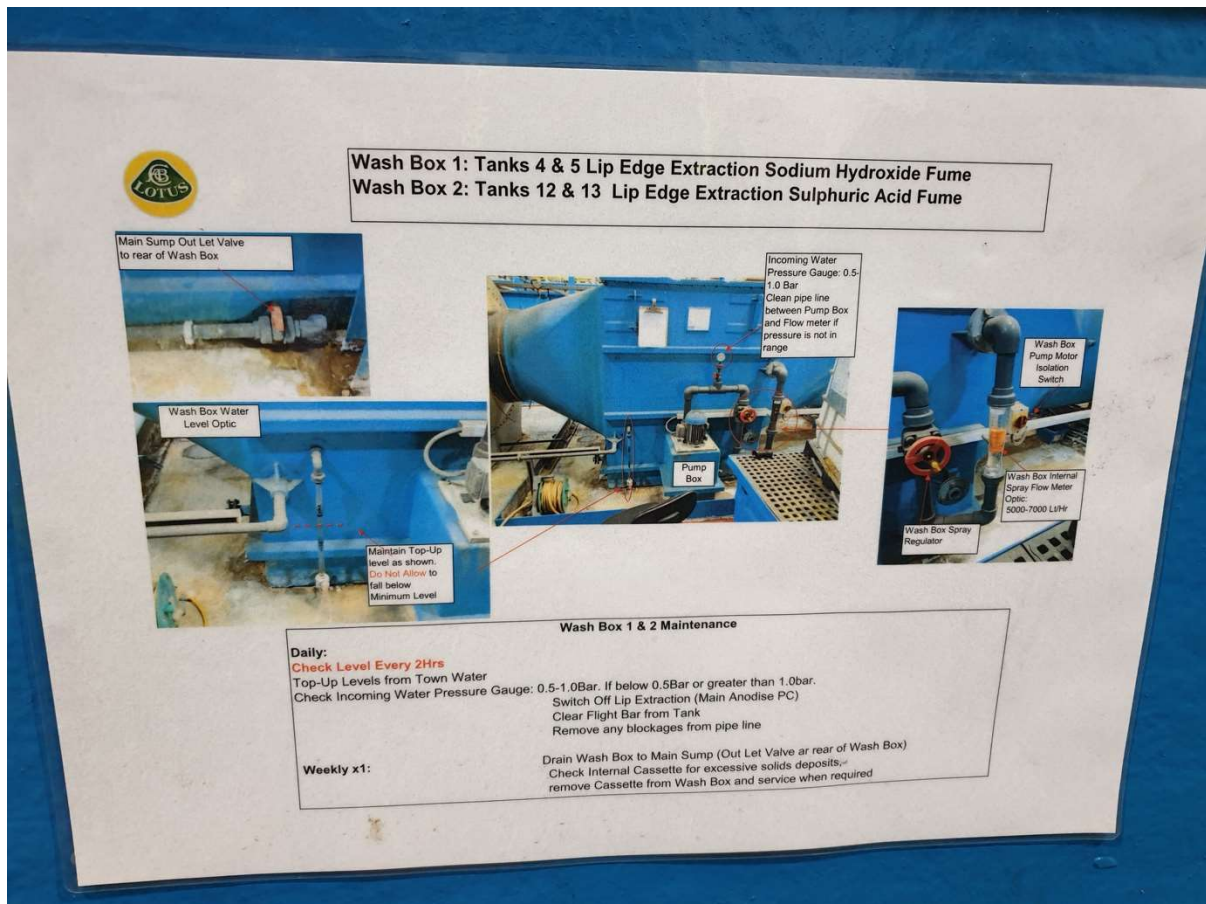
Process Flow





Process Monitoring

The following procedure is followed to ensure the abatement system is working effectively:



The abatement systems are checked every two hours to ensure gauges are within specification to ensure the washbox/scrubber abatement is effective. Additional weekly checks are undertaken and thorough examination of the LEVs are undertaken at least every 14 months, in line with COSHH (examples from 2018 and 2019 have been provided with this submission).

Regular visual inspection of the stacks is undertaken to check for evidence of off-spec air emissions. Emissions monitoring was undertaken in 2010 which demonstrated that emissions from the stack are predominantly water mist with $<0.04\text{mg/m}^3$ Sodium Hydroxide and $<0.10\text{mg/m}^3$ Sulphuric Acid respectively (see B3.004 Redwings Emissions Report which formed part of the Permit Application submission).