

**The Environmental Permitting (England and Wales)
Regulations 2016**

**UNIT 1 2021 FUGITIVE EMISSIONS REVIEW
FOR CONVATEC LIMITED**

**PPC Permit number NP3433BC
Variation Notice number PP3433LP,
Variation Notice number EA/EPR/NP3433BC/V003,
Variation Notice number EPR/NP3433BC/V004,
Variation Notice number EPR/NP3433BC/V005.**

**Issue 15
February 2022**

Fugitive Emissions Review 2021

1.0 Summary

During 2021 the environmental performance improvements made in 2018 (RTO) are still being realised through the completion of annual monitoring. The amount of VOC emitted to atmosphere has been significantly reduced. The site has not received any odour complaints and indeed no general complaints were received during 2021. In terms of fugitive emissions recorded; the table below explains the possible emissions known to site (outside of permitted conditions) and a review of such for 2021.

2.0 Fugitive Emission Review

Fugitive Emission	2021 Review
Emergency Vents	During 2021 there were no emergency vent activations, meaning that no fugitive emissions were released via this mechanism within the process. The RTO has a function to switch into bypass mode in various emergency / abnormal scenarios i.e. equipment failure, high temperature, high pressure, low compressed air, high levels of explosive gas / vapours, low flow, or an E-Stop being pressed. Through 2021 the RTO went into temporary bypass on 16 occasions, mainly due to spurious instrument trips and accidental emergency stop activations. This would of course lead to an amount of fugitive VOC emissions; however, this feature is essential to ensure the safety of the operation. Given the situations which cause the bypass feature to activate, processes are immediately and automatically shut down for safety, meaning the source of VOC emission is stopped and therefore only a very small quantity of fugitive VOC is released for a short period of time. Work is ongoing to prevent spurious activations of the bypass mode.
Process Vents	A project was undertaken in 2019 to redesign the process pipework as such to eliminate the potential of process liquor being entrained within pipework. This project was deemed a success with no records of entrainment and release being made through 2021.
Bund Breaches	During 2021 there have been no recorded bund breaches and so it is determined that fugitive emissions to water via this mechanism have not occurred. During 2022 the site will upgrade its IBC storage which will renew its bunded storage capacity.

Accidental Release (Spills)	During 2021 there have been no accidental releases to ground / water through spills. Currently the site has multiple spill team members, across all shifts, all of whom underwent refresher training on 2nd and 3rd April 2019. Some additional spill response training was held on 3rd December 2021. Site still makes use of an underground diverter tank for IDA and effluent offload, as well as two envirovalve systems, one penstock system and well-maintained spill skits. Raw materials are not manually handled outside any buildings, only in the warehouse and the clean rooms. Materials are transported to the warehouse in bulk on pallets that are shrink wrapped together to prevent a spillage.
Hazardous Waste	During 2021 all hazardous waste has been stored appropriately in lidded / closed containers to prevent any rainwater from mixing with any remaining substance, as well as to prevent any vapours / solid particulate which may build up, being blown into / entering the atmosphere. During 2020 the site undertook a project to produce less cleaning effluent liquid. This was a success and the site now only require ad hoc collections of hazardous bulk cleaning liquid; greatly reducing the requirement for tankered liquid waste to be removed from site. Through 2021 reduction in bulk cleaning effluent waste is still being realised. All bulk liquids are stored in tanks / IBCs within bunded areas. All empty IBCs are capped to prevent drips of substances. During early 2022 a SMCA handling project has been completed, with the expected outcome being a significant reduction in hazardous solid waste generated and stored onsite – also reducing the need for transporting said waste stream.