



A Linkman
Kimberly Clark Ltd
Flint Site
Aber Road
Flint
CH6 5EX

Ein cyf/Our ref: BJ9703IM

Dyddiad/Date: 07 January 2014

Dear Mr Linkman,

Environmental Permitting Regulations (England and Wales) 2010

Effluent temperature

I refer to your letter of 20 November 2013 regarding the temperature of effluent discharged from Kimberly Clark to the Dee estuary.

You demonstrate that there is negligible difference in impact between an effluent temperature of 30°C and 25°C, and that further cooling prior to discharge would not give any measurable benefit.

To maintain compliance with the 30° limit the objective should be to control the temperature in the activated sludge tank. You describe the use of surface aerators for cooling when the temperature rises to 31° or above. Whilst this may achieve the cooling effect it could lead to areas of inadequate aeration in the tank and poor effluent quality. Oxygen uptake is also reduced at this temperature so the aim should be to keep the activated sludge tank below 30° to optimise treatment.

Adding cooling water to the final effluent is not considered BAT when considering techniques to comply with the temperature emission limit. It also increases the overall water consumption of the site. Wherever possible, cooling should be achieved at the front end of the treatment process with heat being recovered for use elsewhere.

The implementation of the improvement plan has resulted in more stable conditions in the treatment plant and improved effluent quality. Any further work to help comply with the temperature limit will also need to take into consideration the requirements of the revised BREF and the BAT AELs which will be enforced within the next few years.

Yours sincerely

Alison Soper

Regulatory Officer PPC/RSR

	INITIALS	DATE
OK FOR PUBLIC REGISTER	AS	8/1/14
COPIED TO PUBLIC REGISTER	JB	Edem.