



ENVIRONMENTAL CASE STUDY 1 Condensate Reduction Project

Customer Requirements

Whilst producing a range of water dispersible granules for a multi-national client, the handling of condensate water was identified as a target for waste reduction, becoming part of a joint efficiency project in partnership with the client.

Condensate water is generated as a result of water being added at the extrusion stage for all extrusion products. This produces an extrusion dough which is then removed during the drying to achieve dry in-specification granules.

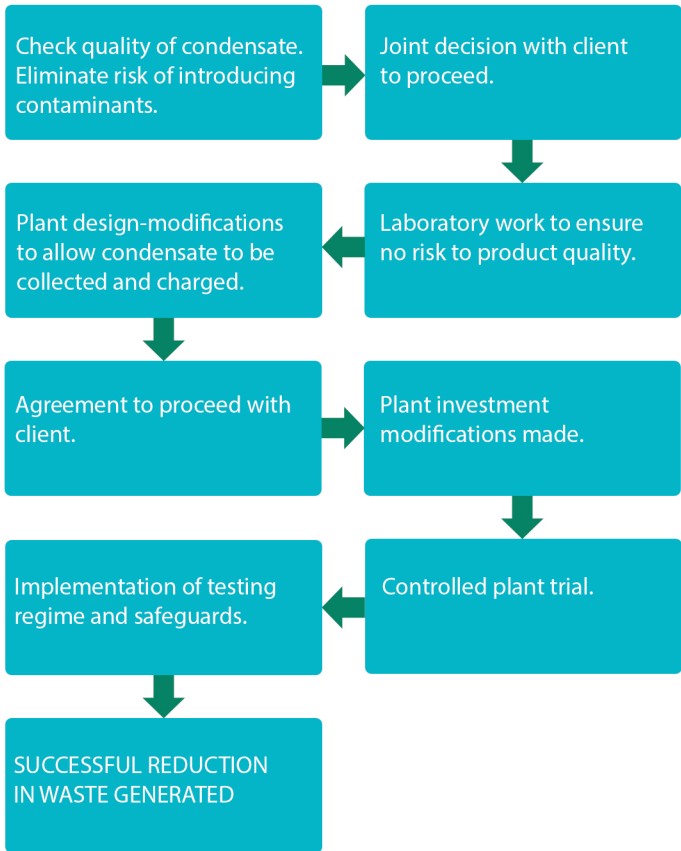
The Condensate was being stored in two designated storage tanks; first through an intermediate sump tank and then on to the storage tank. The Condensate was shipped for hazardous waste disposal in bulk tankers.

This plant is unlike our other extrusion facilities being set-up with a closed loop system that collects the condensate and this provided us with the potential to retreat or reuse the condensate rather than taking the disposal route.

In 2019, the process generated over 400mt of condensate water and 25 tankers were collected.

- The key drivers for progressing the project were:
- Reduced environmental impact.
 - Mitigation against waste cost increases.

Exwold's Solution



The first step was to evaluate whether there was the potential that the recycling of condensate could increase the risk of cross-contamination to the product. Neither Exwold nor the customer were willing to progress further if there was any risk. Condensate samples were collected over a 12 month period and tested by both parties.

