

Interpretation of “physico-chemical” treatment of waste

Purpose

This guidance sets out SEPA’s interpretation of “physico-chemical treatment” of waste and when a PPC permit may be required.

Background

Annex I to the Industrial Emissions Directive (IED) lists certain waste disposal and recovery activities, including using physico-chemical treatment for:

- the disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day (paragraph 5.1(b)); or
- the disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day¹ (paragraph 5.3(a)(ii)).

Installations carrying on such activities require an integrated environmental permit. The IED is implemented in Scotland through the Pollution Prevention and Control (Scotland) Regulations 2012 (PPC2012).

Neither the IED nor PPC2012 define physico-chemical treatment.

SEPA Interpretation of Physico-Chemical treatment

SEPA will interpret physico-chemical treatment as “a **COMBINATION** of physical **and** chemical methods”.

Physical dismantling of a waste motor vehicle, locomotive, aircraft, boat or ship, off-shore equipment/ installation or WEEE, including the removal of hazardous materials and components, would not be considered to be physico-chemical treatment for the purposes of IED. This includes the removal of components or dismantling by hand, the use of hand held tools including power tools and equipment utilising a suction or flushing process to remove fluids for collection.

However, where the substances (liquids, solids or gases) collected during suction processes etc are subsequently treated, the combined processes may be a physico-chemical process and should be discussed with the local SEPA office.

In addition, processing of wastes involving a combination of physical and chemical methods, such as physical processes including air-stripping or filtration and chemical processes including coagulation, chlorination or ozonation may be a physico-chemical processes and should be discussed with the local SEPA office.

The handling of waste in a way which does not change the composition of the waste, such as compaction or other re-packing of dry waste (such as cardboard) to reduce air content would not normally be considered to be physico-chemical treatment. However, where compaction does result in a change in the composition of the waste, the activity may be a physico-chemical processes and should be discussed with the local SEPA office.

Limitations

This guidance applies in Scotland only. The terms of this guidance may be subject to periodic review and be changed or withdrawn in light of technological developments, regulatory or legislative changes (including European end of waste criteria), future government guidance or experience of its use. SEPA reserves its discretion to depart from the position outlined in this statement and to take appropriate action to avoid any risk of pollution or harm to human health or the environment.

¹ Note that the **recovery** of non-hazardous waste using physico-chemical treatment is not a prescribed activity and will require a waste management licence.