ISO 22580 Flares for combustion of biogas

1. chapter introduction: biogas is normally a byproduct

Besides biogas from landfill biogas is usually one of the main purposes producing biogas. also in wastewater treatment plants etc. the produced energy is a main outcome.

2. chapter 3.2: enclosed flare

Please add before the word efficently the word environmental.

3.chapter 3.9: combustion yield

Besides unproductive CO2 and heat nearly nothing should be produced (besides some gases etc in trace form). Therefore, a better definition for the environmental friendliness of a flare would be the term methane slip as this term exactly describes why flares are installed.

4. chapter 5: classification

the used phrase on ingredients gives a complete wrong impression on possible ingredients. The main components of biogas are methane and carbon dioxide. All other gases and trace elements maybe included in untreated biogas are usually less than 2 %. the wording on the ingredients should mirror this.

As the estimated running hours per year have a significant influence on the enviornmental impact, there should be a second classification (besides the one on open and closed flares). this shall be about expected running hours per year:

- continously operated (more than 90 % of the hours per year)
- emergency flare (less than 5 % of the hours per year)

As emergency flares has very low running hours and therefore a complete different impact on the environment trough its exhaust gas, there are complete different requirements for inspection and environmental impact.

5. chapter 6.1: efficiency of the flare

better wording would be oxidation rate as efficiency is not a really purpose of a flare.

6. chapter 6.11: Flow measuring

There is really no need for a flow measuring device within a emergency flare neither in small or big installations.