

## 1 Non-Technical Summary of Determination

### Provide a non-technical summary of the process and determination

DSM plans to construct and operate an animal feed additive production and distribution facility. The proposed development would manufacture a product known as Bovaer®.

Bovaer® is a feed additive for cows (and other ruminants, such as sheep, goats, and deer) which reduces enteric methane emission by approximately 30% for dairy cows and even higher percentages (up to 90%) for beef cows.

The proposed animal feed additive production and distribution facility will result in additional activities being undertaken within the PPC permit boundary.

A caustic scrubber will be installed to all vent streams prior to reaching the off-gas incinerator to neutralise acids from vent gas. All vented gas vapours from the storage and processing of volatile substances will be directed to the off-gas and liquid treatment unit. Additional abatement to support the proposed process includes stripping of the Primary Process Solvent from wastewater. Resultant effluent will be sent to site wastewater treatment facilities and a portion of Primary Process Solvent to the off-gas and liquid treatment unit for thermal destruction.

Effluent from the production process will be integrated into the existing waste water treatment activities at the installation and there will be no change to the existing emissions to sewer.

#### New Technical Plant

- Equipment associated with the new production process including a new production building; tank farms, control room, transformer room, reactor building.
- Off-gas & Liquid treatment consisting of a caustic scrubber, thermal oxidiser, series of three wet scrubbers and a selective catalytic reduction unit and continuous emission monitoring systems (CEMS) for flue gas emissions.
- Emergency generator.

Two new point source emissions to air;

- The off-gas & liquid treatment unit stack
- The emergency generator stack.

In addition the following changes have also been made to the permit at this time, reference to redundant plant has been removed, this includes:

- Removal of boilers 1 & 2
- Removal of temporary boilers.
- Removal of Schedule 8 the production of octabase hydrochloride (a new Schedule 8 has been included).