NITROUS OXIDE EMISSIONS FROM MARINE WASTEWATER DISPOSAL A LIFE CYCLE ASSESSMENT STUDY

INTRODUCTION AND RESEARCH SIGNIFICANCE:

Nitrous oxide (N_2O) is a significant greenhouse gas (GHG) that is increasingly contributing to atmospheric global warming and stratospheric ozone destruction. Anthropogenic nitrogen production, which started at the beginning of the twentieth century, has led to an acceleration of the

CONCLUSIONS:

FURTHER RESEARCH SUGGESTIONS:

Following the completion of the study, there are a number of areas that were identified as requiring further research:

- Marine N_2O emission factors
- Energy recovery options from fertiliser use and biogas capture
- Broader integration of renewable energy technologies in WWTP (i.e. hydropower, biogas recovery)
- Extraction and application of nutrients from municipal wastewater

REFERENCES:

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