

A BAT Assessment against CWW BAT conclusions (BAT conclusions for common waste water and waste gas treatment/ management systems in the chemical sector, COMMISSION IMPLEMENTING DECISION (EU) 2016/902 of 30 May 2016) is provided in the table below. The table lists the BAT elements listed in the decision document and provides a commentary against each showing how the installation will comply.

The installation will class as a new plant as defined in the “Definitions” section of the decision document. The abatement efficiencies listed in the document do not apply to this plant since none of the species listed is emitted.

BAT Element	Site Compliance
BAT 1. In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) ...	The EMS summary report submitted with the application contains a summary of how the EMS elements of the BAT Conclusions will be implemented by specific management plans and procedures.
BAT 2. In order to facilitate the reduction of emissions to water and air and the reduction of water usage, BAT is to establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system	Upon permit issue the emission streams identified and quantified in application reports R01 and R02 will be incorporated into an emissions inventory within the EMS.
BAT 3. For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (including continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. influent to pretreatment and influent to final treatment).	As set out in R01 suitably compliant monitoring will be implemented and managed via the EMS
BAT 4. BAT is to monitor emissions to water in accordance with EN standards with at least the minimum frequency given below. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	As set out in R01 suitably compliant monitoring will be implemented and managed via the EMS
BAT 5. BAT is to periodically monitor diffuse VOC emissions to air from relevant sources by using an appropriate combination of the techniques I-III or, where large amounts of VOC are handled, all of the techniques I-II	N/A – no VOC
BAT 6. BAT is to periodically monitor odour emissions from relevant sources in accordance with EN standards.	N/A – no relevant gas streams
BAT 7. In order to reduce the usage of water and the generation of waste water, BAT is to reduce the volume and/or pollutant load of waste water streams, to enhance the reuse of waste water within the production process and to recover and reuse raw materials.	The RO systems are set to provide maximum efficiency and minimize elutriate.
BAT 8. In order to prevent the contamination of uncontaminated water and to reduce emissions to water, BAT is to segregate uncontaminated waste water streams from waste water streams that require treatment.	RO elutriate is kept separate from surface water streams on site.
BAT 9. In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage	The waste water is generated at very low volumes and is shown to meet the tests

BAT Element	Site Compliance
capacity for waste water incurred during other than normal operating conditions based on a risk assessment (taking into account e.g. the nature of the pollutant, the effects on further treatment, and the receiving environment), and to take appropriate further measures (e.g. control, treat, reuse).	for insignificance by a very large margin. On a mass balance basis it is not possible to introduce more mass flow of pollutants so there is no risk-based need for buffer storage.
BAT 10. In order to reduce emissions to water, BAT is to use an integrated waste water management and treatment strategy	The waste water is generated at very low volumes and is shown to meet the tests for insignificance by a very large margin. There is no BAT justification for further, integrated treatment
BAT 11. In order to reduce emissions to water, BAT is to pretreat waste water that contains pollutants that cannot be dealt with adequately during final waste water treatment by using appropriate techniques	The waste water is generated at very low volumes and is shown to meet the tests for insignificance by a very large margin. There is no BAT justification for further, integrated treatment
BAT 12. In order to reduce emissions to water, BAT is to use an appropriate combination of final waste water treatment techniques	The waste water is generated at very low volumes and is shown to meet the tests for insignificance by a very large margin. There is no BAT justification for further, integrated treatment. None of the BAT-AEL values in Table 3 of BAT 12 are applicable to the discharge.
BAT 13. In order to prevent or, where this is not practicable, to reduce the quantity of waste being sent for disposal, BAT is to set up and implement a waste management plan as part of the environmental management system (see BAT 1) that, in order of priority, ensures that waste is prevented, prepared for reuse, recycled or otherwise recovered.	Waste streams have been identified in R01 and R02 and their recovery routes detailed. As set out in the EMS summary waste control and inventories will form part of the site EMS.
BAT 14. In order to reduce the volume of waste water sludge requiring further treatment or disposal, and to reduce its potential environmental impact, BAT is to use one or a combination of the techniques given below	The waste water is generated at very low volumes and is shown to meet the tests for insignificance by a very large margin. There is no BAT justification for further, integrated treatment
BAT 15. In order to facilitate the recovery of compounds and the reduction of emissions to air, BAT is to enclose the emission sources and to treat the emissions, where possible	The emissions of hydrogen and nitrogen have no environmental impact so require no treatment.
BAT 16. In order to reduce emissions to air, BAT is to use an integrated waste gas management and treatment strategy that includes process-integrated and waste gas treatment techniques	N/A – no relevant gas streams
BAT 17. In order to prevent emissions to air from flares, BAT is to use flaring only for safety reasons or non-routine operational conditions (e.g. start-ups, shutdowns) by using one or both of the techniques given below	N/A no flaring
BAT 18. In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use one or both of the techniques given below BAT 18. In order to reduce emissions to air from flares when flaring is	N/A no flaring

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unavoidable, BAT is to use one or both of the techniques given below BAT 18. In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use one or both of the techniques given below	
BAT 19. In order to prevent or, where that is not practicable, to reduce diffuse VOC emissions to air, BAT is to use a combination of the techniques given below	N/A – no VOC emissions
BAT 20. In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements	N/A – no relevant gas streams
BAT 21. In order to prevent or, where that is not practicable, to reduce odour emissions from waste water collection and treatment and from sludge treatment, BAT is to use one or a combination of the techniques given below	N/A – no relevant gas streams
BAT 22. In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up and implement a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements	As set out in R01 the noise ratings, site configuration and distance to receptors mean no noise impact is expected and no further action is needed.
BAT 23. In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below	As set out in R01 the noise ratings, site configuration and distance to receptors mean no noise impact is expected and no further action is needed.