

Where is legislation to protect the marine environment heading?

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Globally, overboard discharge of treated produced water (PW) resulting from offshore oil and gas production activities remains a principal wastewater management option. Usually, these discharges are regulated through local discharge permits with the oil-in-water (OIW) content as a main regulatory parameter. Management approaches that endeavor to relate the chemical composition of the discharged water to a potential level of harm are referred to as risk-based assessment (RBA) approaches. Such approaches are usually instigated to address the concern that the OIW level alone does not fully represent the potential environmental effects. The objective of RBA is to quantify potential impacts on the environment and to demonstrate adequate management to mitigate the likelihood of such impacts occurring. The concept of RBA to support these broader requirements is firmly established and continues to develop worldwide. For PW discharges in the US Gulf of Mexico, RBA has been part of the National Discharge Permitting System (NPDES) for many years. In 2012, the Oslo-Paris Commission (OSPAR) that governs activities on the North-East Atlantic, recommended PW RBA to all its member countries. To provide consistency and direction towards global good practice, the International Association of Oil and Gas Producers published a guidance document aiming for a broader understanding, acceptance, and consistent application of RBA techniques internationally. This presentation will provide an overview of regulatory approaches applied to offshore discharges from oil and gas activities worldwide, including different techniques for RBA. With the energy industry shifting to renewable sources there might be a need to adapt existing regulatory frameworks, e.g., to properly cover large scale hydrogen and carbon capture and storage activities. The suitability of existing frameworks and techniques for these activities will be discussed. Finally other drivers that cause a shift in the ways wastewater discharges are managed will be presented, like sustainability reporting and water stewardship concepts.