

EN1C: Establish environmental protection zones, associated rules, and regulatory compliance procedures

REGULATORY FUNCTION: ENVIRONMENT		EN1C
OBJECTIVE EN1 Regulatory requirements for water abstraction and management of faecal sludge, effluent or wastewater are in place	ACTION CARD EN1C <h2 style="margin: 0;">ESTABLISH ENVIRONMENTAL PROTECTION ZONES, ASSOCIATED RULES AND REGULATORY COMPLIANCE PROCEDURES</h2>	
COST: High FREQUENCY: One time TARGET GROUPS: Regulators, service operators, Industrial and agricultural consumers, environmental authorities		
DESCRIPTION Regulators actively support the establishment and correct use of boundary zones for environmental protection of sensitive water bodies, through ensuring appropriate abstraction or disposal of wastewater and sludge. This action is performed in coordination with national environmental authorities. Regulators are required to include new zones in their registers, and to follow environmental authority directives in terms of compliance with existing protected areas. Regulators implement this action by withdrawing abstraction or discharge permits previously issued in these areas.		
EXPECTED OUTCOMES <ul style="list-style-type: none"> • Boundary areas are protected from inappropriate wastewater and sewage sludge discharge. • Effective coordination between regulators and environmental authorities is in place. • Environmental directives are transparent and accessible to all interested parties. 		
EXAMPLE 1: EUROPEAN UNION In the EU , nitrates are a relevant pollutant for water and wastewater services, with excess nitrates contaminating water supplies and causing public health issues, whilst improper sewage sludge disposal contributes to increased pollution in water bodies. Council Directive 91/676/aims to protect water quality across Europe by preventing nitrates from agricultural sources polluting ground and surface waters, and by promoting the use of good farming practices. This 'nitrates directive' forms an integral part of the Water Framework Directive and is one of the key instruments in protecting water from agricultural pollution. Implementation of the nitrates directive at country level involves the identification of vulnerable water bodies, designation of nitrate vulnerable zones (NVZs) and establishing associated voluntary and mandatory regulatory requirements for agricultural users within with NVZs, including minimizing nutrient loss to vulnerable water bodies from the application of sewage sludge to land by stipulating limits to nutrients that can be applied.		
EXAMPLE 2: EUROPEAN UNION In the EU , Council Directive 91/271/EEC concerning urban wastewater treatment aims to protect the environment from the adverse effects of urban wastewater discharges and discharges from certain industrial sectors. Specifically, the directive requires the following, amongst others. <ul style="list-style-type: none"> • The collection and treatment of wastewater in all agglomerations of >2000 population equivalents (p.e.). • Secondary treatment of all discharges from agglomerations of > 2000 p.e., and more advanced treatment for agglomerations >10 000 p.e. in designated sensitive areas and their catchments. Sensitive areas must be designated and include the following. <ul style="list-style-type: none"> • Freshwater bodies, estuaries and coastal waters which are eutrophic or which may become eutrophic if protective action is not taken. 		

- Surface freshwater intended for the abstraction of drinking water which contain or is likely to contain more than 50 mg/l of nitrates.
- Areas where further treatment is necessary to comply with other council directives such as those related to fish waters, bathing waters, on shellfish waters, on the conservation of wild birds and natural habitats, etc.

EXAMPLE 3: PERU

In Peru, the implementing regulation of Water Resource Law No. 29338 Article 123, orders the National Water Authority, in coordination with the environmental authority and the corresponding sector authorities, to declare water resource protection zones that prohibit, limit or restrict any type of activity that affects water quality and associated resources. The same Law (Article 129) allows the National Water Authority to declare closed areas prohibiting the execution of water development works, and regulates the granting of permits, authorizations and licenses for water use and dumping.

EXAMPLE 4: GUATEMALA

In Guatemala, the protected areas law, Decree No. 4-89, created the Rainforest Conservation Subsystem with the aim of ensuring a constant water supply of acceptable quality. This subsystem has allowed for the protection of ecosystems such as the tropical premontane rainforest, the tropical montane rainforest and the tropical subalpine rainforest, which cover around 36,108 (ha) of Guatemalan territory.

LINKS

EU: NVZs – EU: https://ec.europa.eu/environment/water/water-nitrates/index_en.html

UWWTD and Sensitive Areas – EU: https://ec.europa.eu/environment/water/water-urbanwaste/index_en.html
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01991L0271-20140101>

Peru: Implementing regulation of Water Resource Law No. 29338

<https://www.minam.gob.pe/wp-content/uploads/2017/04/Ley-N%C2%B0-29338.pdf>

Guatemala: Decree No. 4-89, Protected Areas Law

<https://www.mem.gob.gt/wp-content/uploads/2015/06/5.Ley-de-Areas-Protegidas-Decreto-4-89.pdf>

INTERNAL CAPACITIES NEEDED AND THE ROLE OF PARTNERS

Establishing environmental protection zones requires technical capacities to identify and locate sources of pollution from industry or agriculture, or other sources, and to know what pollutants are being discharged into sewerage systems. In addition, regulators' staff must be trained on how to assess and monitor the ecological status of water bodies. Combined, these skills will help to facilitate the designation and legal establishment of protection zones, and the assignment of related associated restrictions and regulatory compliance procedures. Development partners and environmental authorities can also provide technical support to regulatory reviews, mapping of evidence of pollution and ecological status of water bodies, and planning further environmental surveys, if needed, to fill gaps in knowledge.