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| **TARGET 6.3:** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.  **INDICATOR 6.3.1D:** Proportion of water containing waste safely treated and lawfully discharged. | |
| **Indicator definition and method of computation (MoC)** | |
| **DEFINITION:** Measures thechange in the proportion (% Volume in Ml/annum) of water containing waste produced by households and economic activities, that is no longer required by the water user [*i.e.* that is not reused or recycled], that is safely treated and lawfully discharged.  The term “safely treated” implies that the water containing waste has undergone sufficient treatment such that it complies with a set of water quality standards prior to being discharged, to protect human health, aquatic ecosystems and other receiving water users. The term “lawfully discharged” implies that the discharge of water containing waste:  (1) is permissible in terms of the relevant legislation of South Africa; and  (2) complies with the conditions (applicable water quality standards) contained in the relevant authorisation. | **MoC:**  Calculated by 1) dividing the total volume of water containing waste treated by Waste Water Treatment Works (WWTW) that is compliant to a set of water treatment standards, into the total volume of water containing waste discharged over a 12 month period. And 2) dividing the total volume of water containing waste that is lawfully discharged by Waste Water Treatment Works (WWTW) into the total volume of water containing waste discharged over a 12 month period.  Ninety percent (90%) compliance to the water quality parameters per WWTWs, per month, is regarded as compliant for that month:  𝐶𝑤𝑞 = (Vs/l/VT)× 100  Where:  𝐶𝑤𝑞 is the percentage compliance [%];  Vs/l is the volume that is safely treated or lawfully discharged (i.e. that is authorised and compliant to the conditions of the authorisation);  VT is the total volume of water containing waste that is discharged |
| **Baseline indicator value: 52%** | |
| Source: Green Drop System, Department of Water and Sanitation  \*Base year = 2017 | |
| **Comments:**  While the definition conceptually includes wastewater generated from all economic activities, monitoring will initially focus on the proportion of wastewater that is safely treated by municipal Waste Water Treatment Works (WWTWs): The Baseline indicator value measures the volume of water containing waste treated by municipal WWTW that is 90% compliant to a treatment standard for a maximum of 8 selected water quality parameters over a 12 month period (ending January 2017).  Data is based on results from 893 municipal WWTWs as captured in the Department of Water and Sanitation’s Green Drop System (GDS). The total volume of water containing waste treated is calculated as the sum of the *operating capacities* of all waste water treatment works. Only 85% of municipal waste water treatment works updated this data element. In addition, monitoring compliance for wastewater for the 12 month period ending January 2017 is reported at 45%.  Data presented represents the proportion of water containing waste that complies with either generic or special limits or the authorised limits (where the authorised limits are in place) for 8 water quality parameters. In terms of discharge that is lawfully permitted, 38% of South Africa’s Municipal Waste Water Treatment works were authorised to discharge water containing waste (2017 data). The volume discharged and water quality conditions that apply to the authorised works are however not available at present and data for the proportion of water containing waste that is lawfully discharged could not be calculated.  Household waste and waste from economic activities are not monitored separately. Data on wastewater generated from hazardous industries is not available at present. | |