

MAINTENANCE OF ENVIRONMENTAL QUALITY

TOTAL SET OF INDICATORS

1. AMBIENT ENVIRONMENTAL INDICATORS

E 1.1 *Compliance status of mines and oil and gas with respect to water quality, under CWA or delegated state/tribal program, by 5th code hydrological unit (watersheds) as a proportion of the number of 5th code hydrological units with mines and oil and gas.*

Measure the relative water quality impacts of energy and mineral systems to watersheds.

E 1.2 *Number of permitted extraction or processing sites where water withdrawal causes environmental problems, relative to total number of permitted sites.*

The environmental consequences of groundwater withdrawal in extraction and processing structured to measure the number of affected sites. Impacts of groundwater draw down.

E 1.3 *Number of permitted extraction sites where groundwater is contaminated/ total number of permitted sites.*

Share of mining permitted sites with degraded groundwater. Extent of groundwater degradation occurring at mine sites or caused by mining.

E 2. MANAGEMENT OF EXTRACTION AND PROCESSING

E 2.1 *Sectoral water use, consumption, discharge, loss to evaporation, and reinjection.*

Water use efficiency: How effectively extraction and processing operations recycle their water so as to minimize water taken out of the natural environment.

E 3. RECLAMATION/REMEDIATION/RESTORATION OF ALL EXTRACTION SITES (MINERALS, OIL, GAS)

E 3.1 *Area reclaimed/remediated/restored relative to reclamation/remediation/restoration scheduled in the permit or as required.*

Shows the degree to which reclamation plans are being successfully implemented. Percent of disturbed land reclaimed.

E 3.2 *Pace of abandoned mine and other extraction sites creation and reclamation/remediation/restoration.*

Progress in reducing number of abandoned mines or orphan wells where environmental problems exist. Reclamation of abandoned mines and orphaned wells, as well as, number of "new" sites per year.

EI 4. ENVIRONMENTAL RELEASES

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EI 4.1 *Quantity of release into the environment/Quantity of output.*

Change over time will show whether the sectors are relying more or less heavily on the environment for disposal of residuals from their activity, rather than removing those residuals and disposing them in some other way.