

## Recommendations of the International Joint River Bodies on Plant monitoring

The following requirements are specified to ensure adequate plant monitoring:

- 1 The plant operator must define in-house responsibilities for specifying and checking safety measures.
  - The plant operator must guarantee the efficiency of the plant (this include for example, the wastewater treatment plant)
  - The plant operator must ensure a constant monitoring of the tightness of the plant and all other units and guarantee the efficiency of the safety equipments.
  - The plant operator is responsible for documenting in writing all regular checks that has taken place.
- 2 The plant operator must prepare a detailed report on the causes and consequences of an industrial accident to be submitted to the local authority. This must also state measures to prevent any repetition.
- 3 The plant operator must report any accidental release of substances hazardous to water to the local authority or a central office immediately. Significant failure in the normal operation of the plant must be documented and evaluated.
- 4 The operator should define the equipment for plant monitoring and the related instructions for action, especially with regard to the prevention of accidents on the basis of the state of safety technology and experiences. Especially the water hazard potential, the possibility of substance spillage, precautionary measures as well as the necessity to protect waters which will probably be affected should be considered.
- 5 Depending on the substance releases that could be released in the event of an industrial accident, chemical (e.g. substance concentrations, pH values), physical (e.g. temperature, conductivity) and biological (e.g. bacteriotoxicity) parameters in particular are to be monitored. Any malfunction of a measuring equipment of importance for plant monitoring must be identified immediately.
- 6 Internal monitoring measures must primarily be used wherever there is a need to prevent releases of substances hazardous to water, to make timely detection possible for counter measures to be taken.
- 7 Monitoring by authorities includes:
  - Ensuring that plant operators live up to their responsibility in regard to plant monitoring,

- verifying how often monitoring by independent experts is organised by the operator and whether other regulations would have to be specified as a result of the monitoring, and
  - Conducting in-house random checks or checks by external experts on the installations.
- 8 Monitoring by the local authority could also be conducted through independent experts who, for example, check certain important units of the plant before the start of operation and at regular intervals to establish that the units are in good condition.
  - 9 The system for monitoring waters should be equipped in such a way that accidental discharges of substances hazardous to water can be detected by regional and supraregional checks.
  - 10 Monitoring activities by the authorities and independent experts should be co-ordinated to determine monitoring time and tasks.

