

- Major maintenance/inspection and overhaul procedures which require shutdown of the plant for more than two hours irrespective of availability of standby plant. All such procedures shall be coordinated with a 'Permit to Work' system through the DMAT and the respective Consultant. 'Permits to Work' shall be submitted with sufficient number of working days' notice before the work is to be carried out/the proposed shutdown.
  - Emergency procedures which require immediate action.
- e) All operation and maintenance is to be carried in accordance with EHSMS codes of practice including any work carried out in confined spaces. Operators working in confined spaces shall be fully trained, competent and accredited for entry and the nature of work to be undertaken.
- f) Achieve the following:
- Optimum control of resources
  - Best cost management and auditability
  - Ability to respond to emergencies and complaints
  - Operation of the assets at peak efficiency at all times and with the least nuisance to the public
  - Adherence to the planned maintenance program

## **2.3 System Surveillance**

Surveillance of supply/distribution system is carried out to:

- detect and correct hazards;
- detect and correct any deterioration of the stormwater system facilities;
- detect encroachment of the system facilities by other utilities such as sewer and irrigation water lines, power cables, telecom cables, etc. and
- to detect and correct damages to the system facilities by vandalism.

These checks shall be done routinely. In addition checks are done under special circumstances for assessing damage of the system after flooding along the alignment following a heavy storm. All these checks are also done for above ground facilities. Any activity or situation that might endanger the facilities shall be investigated and corrective action shall to be taken.

Surveillance shall also include looking for unauthorized construction activity on or near the facilities which may pose a physical threat to the system. Any excavation near the system shall be closely supervised.

## **2.4 System Capacity Review**

The O&M responsibilities will include for the measurement of those asset performance parameters that monitor the efficiency of the assets, and their spare capacity against actual usage. The data will be recorded and used to measure operational efficiencies against maintenance requirements and predict the asset future upgrade requirements for the assets. This will result from a whole life cycle cost analysis, being constantly studied on a rolling basis.