## NaWaTech Project Template List Roles and Responsibilities for system safety, O&M and monitoring

| Preparatory tasks   | During 1 <sup>st</sup> year of operation | Long-term operation |
|---|--|---------------------|
| Development of standard operation procedures and documents (inspection list, documentation formats, etc.)         |  |                     |
| <ul> <li>Development of risk-based operation procedures and integration in O&amp;M documents</li> </ul>           |  |                     |
| <ul> <li>Initial training of operators (or other relevant on-the-ground staff, e.g. gardener)</li> </ul>          |  |                     |
| Initial training of supervisors of operators  |  |                     |
| Follow-up trainings, re-fresher trainings for rotating staff  |  |                     |
| Implementation of workers safety measures   |  |                     |
| Regular ("day-to-day") O&M tasks  |  |                     |
| plant operation, inspection routines, regular maintenance, cleaning, etc.   |  |                     |
| spare part management and purchasing (consumables)  |  |                     |
| Supervision of regular operations and minor maintenance   |  |                     |
| Trouble-shooting and major maintenance  |  |                     |
| Trouble-shooting  |  |                     |
| Periodical (major) maintenance  |  |                     |
| Supervision of major repairs/ periodic major maintenance  |  |                     |
| spare part management and purchasing (big parts)  |  |                     |
| Safety & performance monitoring   |  |                     |
| Sample taking   |  |                     |
| Sample analysis   |  |                     |
| <ul> <li>Interpretation of monitoring results in terms of implications for plant operation/improvement</li> </ul> |  |                     |
| External audits (comply with environmental standards)   |  |                     |
| Resource and staff management   |  |                     |
| <ul> <li>Resource allocation and decision making (budgeting for staff costs, spare parts, consumables</li> </ul>  |  |                     |
| Complaint management  |  |                     |
| Overall legal responsibility  |  |                     |
| Definition of training needs due to staff rotation  |  |                     |
| <ul> <li>Yearly (or regular) review of risk assessment, O&amp;M and safety procedures</li> </ul>                  |  |                     |