SUMMARY


Clean water and sanitation sector is characterized by having many risks, namely institutional, organizational, and operational risks. However, many water companies in Indonesia have not implemented risk management methods and tools as part of companies’ policy and strategy. The research aims to identify and analyze operational risks faced by water companies, from raw water extraction process, water treatment, water distribution, to customer management processes. The result of this study is risk management formulation for significant operational risks.

The research used PT Aetra Air Tangerang as a case study and is conducted using primary and secondary data. Operational risks are identified through interviews and analyzed by assessing the likelihood and impact of each risk through questionnaires. The result of the risk analysis is mapped on a probability impact matrix to obtain significant risks. Actions for managing significant risks are formulated based on observation and literature studies.

Research shows that operational risk in water supply provision is largely caused by process and external factors, with the highest number of risks identified in the customer management process. However, almost all risks in the customer management process are not significant in terms of their possibilities and impacts. Based on the analysis, significant risks to Aetra Air Tangerang are the risk of quality and quantity of raw water, leaked transmission pipes, relocation of raw water facilities, production failures, supply disruptions, low water pressure, availability of contractors, and delays in the installation of meters. The most significant risk is found in the raw water extraction process.

Before managing the risk, company needs to set risk policies and establishes a risk management structure. Because the significant risks identified are mostly caused by external factor, part of the risk control involves maintaining effective communication and coordination with relevant stakeholders, and involving stakeholders in socialization activities and CSR programs to provide an understanding of the importance of the stakeholders role in the sustainability of clean water provision for the community. In addition, to control risks caused by process factor, company needs to develop procedures and guidelines as a reference in the risk management, as well as periodically reviewing the risk register that has been prepared to ensure that the identification and control of risk in the document is still relevant.

Keywords: operational risk, probability impact matrix, water company