

Figure 21. General approach for risk analysis in the QRA.

Given the nature of the project, several variables were approximated or estimated to provide this QRA. For example, accident rates involving ISO containers in intermodal shipping via rail in the US are not available. Currently, the Federal Railroad Administration (FRA) has not codified guidelines for acceptable risk to individuals or society. Thus, the risk values are compared to quantitative risk criteria for stationary LNG facilities provided by NFPA 59A as recommended by the FRA team. The representation of NFPA 59A risk criteria for IR and SR in this report has been done for the purposes of comparing the transportation risk to a set of related criteria and may not be appropriate or directly applicable for assessing acceptability of transportation risk. Additionally, the risk profiles for LNG shipping are compared to another hazardous material (HAZMAT) as requested by the FRA; FECR, along with many other railroads, currently ships propane by rail so this was used as a benchmark comparison for the risk of shipping LNG in ISO containers.

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