Questions received during the live webinar session held on 21th October 2020

1. **Which dispersion is dangerous? 1. Total vapor dispersion 2. Vapor dispersion with some mist of liquid?**

   The answer is: it depends! For a 'total vapor dispersion', there can be a large gas cloud at an early stage following the release, which may lead to a large explosion in case of delayed ignition of the cloud within the flammability range. However, the 'duration' of the incident will be relatively short. For the second case, the gas cloud initially will be smaller. However, the liquid (that would have rained out) will evaporate and will create a longer duration event. This can then have a bigger consequence.

2. **How are you trying to make safety decentralized? How can we use it at our facilities?**

   We are trying to make safety decentralized by enabling our clients to use simulation and modelling techniques themselves by mentoring their in-house teams. We have done it in a handful of situations and believe in democratization of modelling services where sites/plants/chemical facilities are able to carry out some of the simulation work themselves, with support from our side.

3. **Are the results of general CFD software like ANSYS, Open Foam better than that of FLACS, KFX?**

   Again, the answer is: it depends! For accidental releases, we would prefer FLACS and KFX in complex geometries as they are much more efficient for running a large number of scenarios which are needed for evaluating safety/risk from loss of containment and are reasonably accurate to get a good estimate of the average gas cloud sizes that may be expected. However, for planned releases (such as exhausts from engines, etc.) where only a few scenarios need to be simulated, it is advisable to use general purpose CFD tools such as ANSYS Fluent which would be more accurate and also provide tools such as adaptive mesh refinement to capture the exhaust plumes better.

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