

REPPIR 2019 Datafiles

Two sets of datafiles have been developed to assist operators in their application of REPPIR 2019. Please find below brief descriptions of the two sets of datafiles. If you would like to request one or both datafiles, please email: REPPIRdatafiles@phe.gov.uk. When requesting access to the datafiles please also detail: the name of the operator who intends to use the datafiles, whether the operator plans to use a subcontractor to carry out the assessments under REPPIR 2019 (and if so, the name of the subcontractor), the intended purpose of the datafiles, and which datafiles are being requested.

Upon request of the datafiles, a data license agreement will be issued. The primary conditions within the agreement are the use of the datafiles for the purposes of REPPIR only and to not use the datafiles for commercial gain. An accompanying user guide will be shared with the datafiles, explaining their contents and how to use them.

Dose Datafiles to assist in the application of REPPIR 2019

If an inventory exceeds the limits specified in Schedule 1 of the REPPIR 2019 Regulations, then, subject to certain exceptions, the REPPIR 2019 Regulations will apply. Where a site's inventory exceeds the values of Schedule 1, and no exemption applies, that site must always undertake a hazard identification in Regulation 4. The Dose Datafiles may be used during the hazard identification in Regulation 4 of REPPIR 2019 to show that although a particular inventory exceeds the Schedule 1 limits, it could not in practice lead to an annual effective dose to members of the public of greater than 1 mSv.

This is effectively a refinement of the calculations used to derive the values in Schedule 1 and is intended for use by sites for which the conservative assumptions made during the calculation of the Schedule 1 values are not appropriate and for which a more detailed consequence assessment would be disproportionate.

Specifically, these datafiles enable four of the Schedule 1 assumptions to be varied (release fraction, release height and source to receptor distance where the receptor is the location members of public reside and the location of food production), and the resulting effect on the potential dose to a member of the public to be calculated.

While the intention is for the datafiles to be applicable across as broad a range of scenarios as possible, the operator has a responsibility to justify their use, taking into account site conditions and the hazard in question.

Environmental Concentration Datafiles to assist in the application of REPPIR 2019

The datafiles are intended as a tool to assist operators in carrying out consequence assessments as defined in Regulation 5 and Schedule 3 of the REPPIR 2019 Regulations. They contain environmental concentration estimates calculated on the basis of atmospheric dispersion modelling for a unit release of radioactive material. These environmental concentrations can then be used as an input to the dose assessments required as part of the consequence assessments.

The datafiles are primarily intended to be used by operators of relatively lower hazard sites to avoid the necessity of carrying out their own site specific atmospheric dispersion modelling where the requirements of carrying out such an assessment may be disproportionate to the scale of the hazard. The datafiles may also be used as supporting information, alongside the results of any atmospheric dispersion modelling performed by an operator.

The datafiles have been developed in such a way as to be broadly representative of a range of meteorological conditions across England, Scotland and Wales. While the intention is for the datafiles to be applicable across as broad a range of scenarios as possible, the operator has a responsibility to justify their use, taking into account site conditions and the hazard in question. They are not intended for use by larger hazard sites such as nuclear power stations.