

C 3.4b Air Emissions Sampling

Environmental permit EPR/CP3507PJ does not currently specify any requirements for sampling point source emissions to air hence no formal sampling is currently undertaken for the purpose of monitoring and reporting on the quality of emissions to air.

However, gas fired singeing plant and boiler plant to which the release points F1 and F2 relate, are checked on an annual basis as a minimum by a competent third party to ensure that the plant is working safely and efficiently. This will continue to be the case for the replacement gas fired steam / hot water boiler which will continue to exhaust via release point F2.

The exhaust gas flue serving the replacement boiler plant incorporates a sampling point from which representative samples of the exhaust gases can be taken during service and performance checks without the need for specialist access equipment.

The picture below shows the location at which samples of exhaust flue gas are taken from the Byworth Yorkshireman steam boiler.



As described elsewhere in the permit variation application, installation of the effluent treatment plant will introduce a new point source emission point to air designated F29. The primary influent rotary filtration plant bio-sludge dewatering plant, along with temporary storage of wastes generated by the plant are located within a purpose designed and constructed building. As the materials handled and stored within the building are potential sources of odour, the building is fitted with a positive ventilation system which allows building openings to remain closed during normal operations. Air is extracted from the building at a rate of 8000 m³/hour via two identical abatement equipment lines operating simultaneously in parallel. Each line includes an extraction fan which pumps air at a rate of 4000m³/hour through a 2.4m diameter, 4.8m high activated carbon adsorption filter before it is released to atmosphere via a common vent which serves both activated carbon filters. The activated carbon filters are located outside the effluent treatment plant building.

Air samples will be taken on a bi-weekly basis from within the ETP building and at the activated carbon filter common vent outlet to atmosphere and analysed using direct reading short term adsorption tubes, photo-ionisation detection or similar equipment.