Quirepace Limited have completed two BVC central vacuum cleaning system projects within an Energy from Waste facility in two completely different areas of the process. For the first requirement areas on the facilities 'viewing floors' needed to be cleaned, household waste is delivered into the facility and an overhead crane process it constantly this causes convection making light dusts rise and settle out at high level within the area, primarily on the viewing floors and on the mobile crane itself.

The system has been designed for 2 people using 51 mm hoses and tools for general cleaning of floors and building structure. One hose connection point has been provided on each of the three view platforms with two hose connection points along the access walkway above so that cleaning of the cranes can be achieved.

Before cleaning



Due to the span of the facility the horizontal overhead crane has to serve the system has been designed allowing for up to 22.5 metres of flexible hose to be attached to any hose connection. Two further vertical pipe extensions have been provided one to each for the air intake filter areas for cleaning purposes.

Motive conveying air for the system is being generated by a BVC Centurion Ti80 industrial vacuum cleaning machine powered by a 15.0 kw motor with the machine being protected from overheating by a vacuum relief valve being located in the pipe work upstream of the inlet to the machine.

Displaced air is filtered within the BVC 'clear flow' filtration system and particles collected within a removable bin at the base of the unit which is provided with a bin balance arrangement for use

with plastic liners which can be dropped over the side of the viewing platform ultimately dropping on to the household waste below.

The facility is not zoned under the ATEX Directive however BVC included for a number of features within their machine including antistatic filtration media and a stainless-steel inlet baffle ensuring static dispersion and reduce the potential of a spare being generated if a ferrous particulate was removed by the system.

After cleaning



The second application is on the ground floor of the facility beneath the two boilers where there are four platforms, each of these have been provided with a simple pipe work system provided with a vacuum relief valve. At ground level another industrial vacuum cleaning machine has been provided, for this application of one operator using a 51 mm bore flexible hose and tool BVC Centurion Ti80 industrial vacuum cleaning machine powered by a 7.5 kw motor.

The bulk of the materials being handled is inert ash which is collected in the removable bin at the base of the unit which is fitted with a certified 'lift and tip' forklift attachment which enables the client to remove/ transfer/and tip the material for off-site removal.