

RVT Group keeps the air clean during Crawley Hospital refurbishment

May 2017

The project

- Redevelopment of the hospital's Urgent Care Centre, including a new six-bed Clinical Assessment Unit (CAU) and improved treatment and waiting area for children
- Conversion of a vacant space on the hospital's sixth floor to a sub-acute ward for 26 patients

The facts

- Crawley Urgent Care Centre is open 24 hours a day, 365 days a year
- £5 million budgeted for the Urgent Care Centre refurbishment, £2 million for the new sub-acute ward
- Architects Brodie Plant Goddard created the designs
- Morgan Sindall contracted to carry out the work
- Both units to be ready for use in early 2017

The Challenge

It was essential that hospital services could continue operating normally during the building works. To protect patients, their visitors, and the staff, dust generated by the works needed to be kept away from working areas of the hospital.

Controlling and monitoring dust in a medical environment



Crawley Hospital required major redevelopment of its Urgent Care Centre to provide an enlarged Clinical Assessment Unit, improved Paediatrics treatment rooms and a new open plan waiting area. The scheme also included the construction of a 26-bed sub-acute ward for patients no longer in need of acute care at other hospitals.

The surrounding parts of the hospital needed to function as normal, so it was vital that dust was not allowed to escape from the areas under construction. Effective control of the dust was therefore required, as well as the means to check that it was being kept safely away from staff and patients.

Nowhere is the control of dust more crucial than in a hospital. Many patients will have conditions that are seriously aggravated by dust, and all patients, staff and visitors need to be protected as far as possible from airborne contaminants. Before any work could commence, it was clear that dust would need to be both controlled and monitored.

Key benefits of RVT Solution

- Our powerful filtration equipment ensured dust from the construction works was efficiently captured and controlled.
- The dust monitoring system gave complete assurance to the staff and contractors alike that the construction activities had no negative impact on the hospital
- By enabling the rest of Crawley Hospital to continue functioning normally during the works, the contractor was able to show its ability to operate in even the most sensitive of environments.

“The extract system does exactly what it’s meant to do.”

Mark Bryan, Night Site Manager, Morgan Sindall Construction & Infrastructure

Protecting patients, staff and visitors

A dust control solution with demonstrable effectiveness

RVT was called upon for specialist advice and conducted a site survey. To control the dust, RVT’s Mini DustMaster kits were deployed. These kits capture and filter the dust created and also maintain a negative pressure in the work area, ensuring against any migration of dust and therefore fully protecting the other sensitive areas of the hospital.



The works that required dust control were only able to be carried out at certain times each day so that the speed of setting up and taking down the dust extraction system including barriers was key to making the project a success.



To monitor the effectiveness of the dust control a dust monitoring system was installed, starting one week prior to the commencement of works to provide a base line reading of the air quality levels. Stringent parameters were set to provide alerts if certain levels were reached. The monitors were configured to give the site-team access to real-time data, allowing

air quality levels to be checked at any time. This, combined with the availability of downloadable reports directly from the monitor, meant the site-team had full access to the information.

