## **Plant Room Lighting - Energy Efficient Control**

It was discovered that the lights in every plant room of a large site were permanently left switched on even when the rooms were unoccupied. A lighting scheme was developed to minimize the time that working lighting levels were provided whilst the rooms were unoccupied.

The system provides the following functionality:

- minimum egress lighting levels are maintained at all times;
- supplementary lighting is switched on manually on entering the plant room to provide working lighting levels;
- supplementary lighting remains on for a fixed period (adjustable);
- visual and audible alarms operate a fixed period before the supplementary lighting is due to be turned off (adjustable);
- during this period, occupants have an opportunity to reactivate the system from switches located around the plant room;
- if the system is not reactivated the supplementary lighting is turned off;
- meters are provided to monitor energy consumption.



Visible Alarm and a Permanent Egress Light Fitting



**Lighting Control Panel** 



Manual Switch and Signage

## **Benefits**

- conservation of energy whilst providing a safe working environment;
- improved safety over simple motion sensors which may not provide sufficient coverage due to the obstructions typically encountered in a plant room environment;
- convenient operation;
- manual initiation minimizes the risk of spurious operation;
- payback is typically of the order of one to two years.