



# Emergency Head Counting Systems

## Emergency Head Counting System (EHCS) : Perimeter Access Control System for the Most Demanding Environments

**EHCS** from Sieva Networks is a system that enables administrators and safety officials to maintain perimeter access and monitor personnel movement during both regular operation and emergencies. **EHCS** helps to control and secure the perimeter of their facilities and access to sensitive areas. **EHCS** is particularly suited for mission critical facilities such as nuclear reactors, oil and gas plants, ammunition depots etc. All personnel are supplied with identification badges that are certified to be compliant with the most rigorous standard for use in explosive and hazardous environments (with ATEX certification). **EHCS** automatically tracks movement and provides information about how many have entered a zone, left a zone and how many are currently in a monitored zone. **EHCS** can issue automatic alerts when the number of people in a given area exceeds what is permissible. **EHCS** provides a wide latitude for the type of alerts issued and even an employee running in the plant can trigger an alert

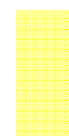
### Applications

- Oil and Gas plants
- Nuclear Reactors
- Ammunition and Armament Depots
- Industrial Chemical Plants





- Critical Area to be monitored has several ENTRY/EXIT doors (marked in the diagram as A, B and C)
- The objective of EHCS is to try to monitor who is currently within the Critical Area as well as create logged data for who was there earlier and the amount of time they were in there
- To create alerts if someone is in the Critical Area location for more than a certain amount of time OR if there is safety violation within the Critical Area, to figure out who is within the Critical Area to pass it on to First Emergency Responders



Critical Areas to  
be Monitored in  
an Entire Facility  
Floormap

**Illustration of how EHCS can provide  
monitoring in real-time at different  
locations of an entire facility**



# Emergency Headcount CHECK-Tag<sup>®</sup>



- All entrances as well as strategic points are fitted with a CHECK-Tag<sup>®</sup>
- CHECK-Tag<sup>®</sup> is an extremely durable passive RFID tag (that can withstand high temperatures) that stores the number of people that have gone past a certain point and also stores location information. The data is programmed into the tag by the basestation
- During a catastrophic event that disrupts normal operation and power supply (e.g. an earthquake, an accident, system shutdown), CHECK-Tags<sup>®</sup> enable first responders and safety personnel to identify the number of people that have gone past a certain point. The information available enables rescue operations and to plan next steps in a mission critical situation
- CHECK-Tags<sup>®</sup> use Sieva Network's unmatched high endurance memory IP that enables program cycles of 10 Million to 100 Million times (which is at least 100x of what is possible with any other RFID tags available today) enabling long lifetimes in excess of 50 years. CHECK-Tags<sup>®</sup> can also be built into concrete during the building's construction



# EHCS Completely Integrated With SievaSync



SievaSync application  
flow diagram

