

NDMRB – University of Oxford **NDMRB-SOP-030 Issue 001 – March 2017 (AKK)**

## NDM Research Building Ultra Low Temperature (ULT) storage monitoring system

### 1.0 Introduction

The ULT storage systems in the NDMRB will be monitored using a wireless monitoring system which is web based. The manufacturer of the monitoring system is “Comark” and will be referred to the “Comark System” throughout this SOP.

### 2.0 The Comark System

Each -80 freezer and cryo store has its own allocated transmitter (fig. 1). The transmitters send the signal to the “gateway” (fig. 2) and then the gateway will recognise if a freezer is in alarm.

There is a sequence of events that happen when a freezer goes into alarm. In the first instance the Comark system will ring a list of people that are allocated to a gateway. People are allocated spaces in the gateway allocated to triggers. Trigger one has spaces 1-6 (-80 freezers), trigger 2 has spaces 7-9 (cryofreezers) and the system will call in number order depending on which trigger is activated. It is these people who must log on to the system and alert the people responsible for the freezer.



Probes for the  
RF516 Wireless  
Transmitter

Fig 1



Fig 2 – Comark Gateway

### 3.0 What to do in the event of an alarm

#### 3.1 For -80 Freezers

If you are a “first contact” for the gateway you will receive a call from the system and when you answer the phone you will hear:

*‘This is a freezer alarm, press the hash key to acknowledge the alarm’*

By pressing the hash (#) key you acknowledge the alarm on your phone but you must log on to the system to stop the alarm. The alarms repeat every 15 minutes unless acknowledged on the system.

To log on to the system your home PC/laptop must have VPN access in order to be able to view the intranet Comark site. The IP addresses for each Gateway are as follows:

Ground floor <http://129.67.91.239/>

First floor labs <http://129.67.91.96/>



Once you have logged on to the Comark site you must then check which freezer is in alarm, the group and then the freezer will be highlighted in red in the status bar. If you select the red box in the status bar it will give you the option to acknowledge the alarm. You can then stop repeat alarms by selecting “Repeat alarm off” but ONLY in the acknowledge alarm window.

The next step is to call the relevant contacts for the freezer that is in alarm. If you cannot contact them you must make your way in and start the process of relocating the contents of the freezer to the back up -80 which is on the second floor at the end of the primary lab space. You can call the facilities on call number (07788443286) for assistance. If you drive to site out of hours to rescue a freezer please put a sign on your dashboard which reads “Emergency Call out NDMRB” to avoid parking penalties. In the event of power failure to the whole room you must contact the facilities team and the lab manager.

### 3.2 For Cryo stores

Emergency procedures for the failure of a cryo store, the liquid nitrogen room are outlined in NDMRB-SOP-031 NDMRB Liquid Nitrogen and -80 freezer Emergency Procedures and Failure Protocol.

In brief, the gateway will call the facilities team and the facilities team will contact the relevant groups. Failure of a cryo store or the liquid nitrogen room and the subsequent rescue operation will be led by the facilities team.

### 4.0 Information to have at home if you are a first contact for the Comark System

- ❄ Freezer map for the -80 room
- ❄ An up to date list of -80 freezer contacts, this can be obtained from the lab manager. NB: We do not publish the lists on the website because the numbers are often personal numbers
- ❄ Ensure that you have VPN access from home to access the Comark IP addresses
  - ❄ Instructions for setting up VPN on computers, smart phones and tablets can be obtained from the IT services website here:
    - ❄ VPN Configuration: <http://help.it.ox.ac.uk/network/vpn/index>
    - ❄ NB: Comark does not work very well on iPad's/iPhones

### 5.0 Review

The information in this document will be reviewed and amended if necessary every 3 years by the laboratory manager or alternative relevant personnel.

### 6.0 Associated Risk Assessments and SOP:

[NDMRB-SOP-018](#) Safe use of ULT freezers

[NDMRB-RA 018](#): Use of -80C freezers

[TDI-SOP-005](#) Handling, Storage and Use of Liquid Nitrogen

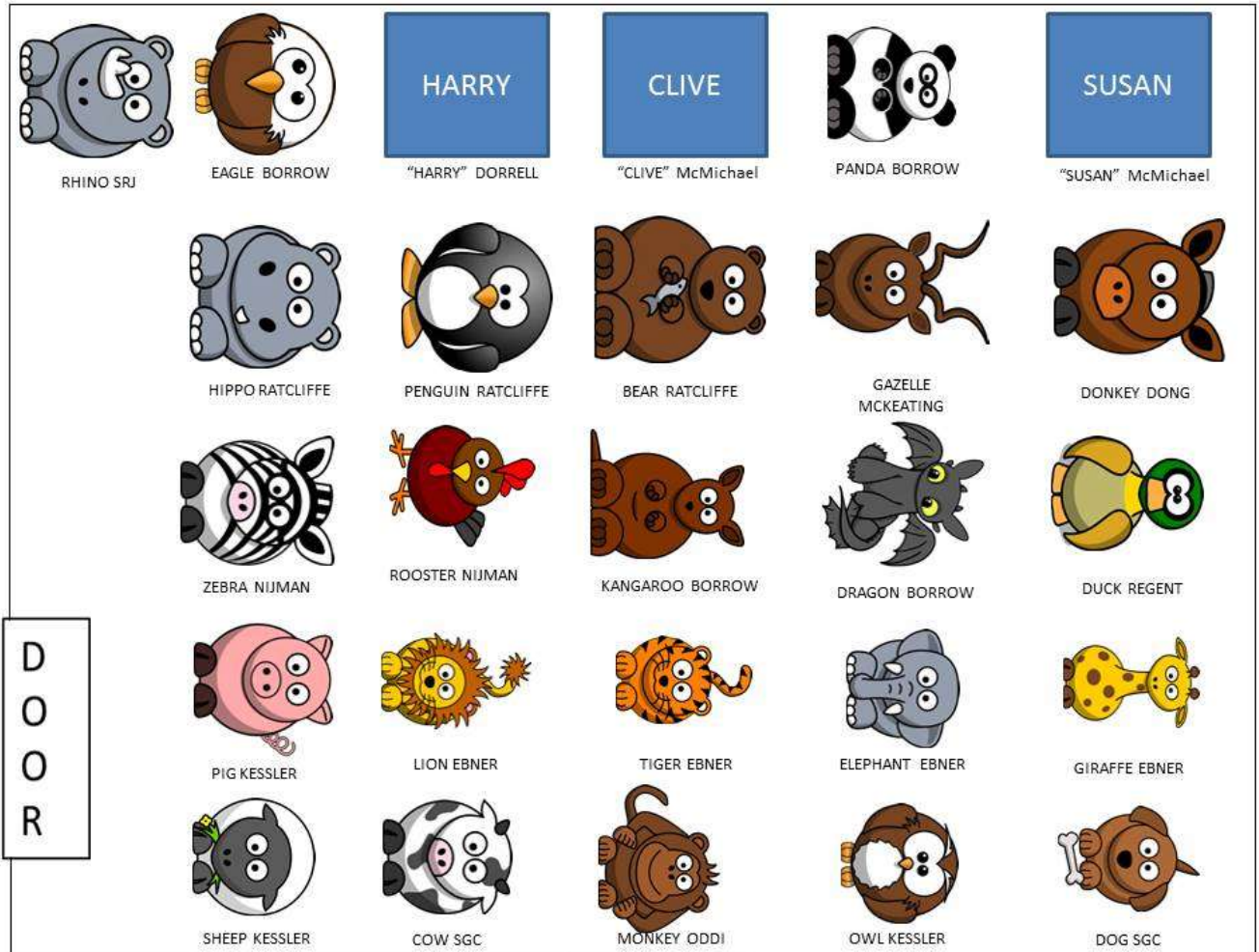
[NDMRB-SOP-005b](#) Liquid Nitrogen Emergency Procedure (Room/freezer failure)

[TDI-RA-005](#) Handling, Storage and Use of Liquid Nitrogen

- ❄ University safety policy [UPS S4/03](#) Liquid Nitrogen

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**APPENDIX 1: -80 freezer room layout.**



## APPENDIX 2: Cryo room layout

