Property Services Technical Memorandum – Hard FM

Guidance on Building Closure or Reduced Site Operations

Author: Ian Hardy – Hard FM Manager

Reviewer(s): Jon Holden - Head of Property Services
Mike Adams – Maintenance Manager

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Appendices

1.0 Background

This technical memorandum has been created to help those with building management responsibilities at NYCC schools.

It has been set in the context of the COVID -19 outbreak that is resulting in school closures, or partial closures, from Friday 20th March 2020

2.0 Control

It does not supersede any existing Business Continuity Management (BCM) or Business Continuity Plans (BCP) that are currently in force, it is meant to complement them from a building management perspective

3.0 Requirements

The requirements will be split into the following areas:

- Security
- Life Safety and Property Damage
- Building Engineering Services
- Energy

3.1 Security

Site Perimeter

Ensure that the following are in a good state of repair and working:

- Fencing
- Access gates, both pedestrian and road traffic. If these have the capability to be locked ensure these work and the key location and key holder is known to the key stakeholders
- Perimeter lighting, especially in vulnerable areas
- Boundary Intruder alarms

Buildings

Ensure that the following are in a good state of repair, working and can be locked or secured:

- External doors
- Windows
- Roller shutter doors
- Basement access points
- Intruder alarms (if linked to a central monitoring point ensure they are aware in the changes in the school operating times/patterns)

3.2 Life Safety & Property Damage

Item	Action	Comments
Fire Alarm Systems	1. Check alarm panels are healthy and showing on faults 2. Check all “call points” and in good order and not obstructed	If building is going to be at reduced occupancy levels normal fire alarm checks should be carried out.

Smoke Detector	1. Check detectors are healthy and showing no faults	If building is going to be at reduced occupancy normal smoke detector checks should be carried out.
Sprinkler Systems (if fitted)	1. Check sprinkler tank is full 2. Check sprinkler pump sets and operational and battery charging units and healthy 3. Check valves are in correct operating positions 4. Check Diesel fuel tank is full 5. Check sprinkler pump house is secured 6. Valve sets are in correct operating mode 7. Check Maintenance is up to date and will be valid when site is back in normal operations	If sprinkler maintenance is out of date or inspection by prevention loss survey, then any insurance warranty maybe in validated. It building is going to be at reduced occupancy normal sprinkler tests should be carried out.

In general, it is recommended to leave the Fire Alarm systems in an operational mode. This will ensure the building remains protected throughout any de-commissioned, mothballed or unoccupied period.

In any event, the de-commissioning process shall be co-ordinated by a specialist service provider, approved to BS 5839 part 1.

The de-commissioning process shall be co-ordinated by the specialist provider in line with the overall mothballing/de-commissioning programme.

3.3 Building Engineering Services

System	**Action**	**Comments**
Air conditioning systems	1. It the system is not required to provide cooling to any critical environment then turn off	Mothballing procedures would not normally be needed if systems remain inactive for less than three months

Asbestos	1. Ensure that the asbestos register is available and in an accessible place if not available on Concerto (CAFM system)	Ensure this is accurate and up to date and therefore reflects the current state of the school fabric
Boilers (and other Gas systems)	1. Ensure the maintenance is up to date and will be during the duration of reduced school operations. Annual Test Certificate and Gas Installation Maintenance Plan. Maintenance required by GSIUR Regulation 35 2. Ensure the control panel is healthy with no faults and alarms/safety trips are fully functional 3. If there are any water softener or chemical dosing systems ensure these are stocked for the period of reduced site operations	These will need to be left operational if heating is required for either space heating or domestic hot water heating
Building Management Systems (BMS)	1. Ensure the maintenance is up to date and will be during the duration of reduced school operations 2. Ensure the BMS is panel is healthy with no faults and alarms/safety trips are fully functional 3. If connected to the Property Services Energy Team ensure connectivity is working and advise Energy team.	If frost protection is required during the 'mothball' period of the property, the heating system shall be left fully operational. The BMS/control systems will control safety overrides to protect against low internal ambient temperatures and frost.
Electrical Fixed Wiring Installation	1. Ensure fixed wiring installations are in date and will be when returning to normal school operations. 5 Yearly test of 100% of the installation (can be phased – say 20% of installation per year)	If isolation, or disconnection of any areas is required this should be done by a competent person

Lifts and Lifting Equipment	1. Ensure all passenger lifts are in date with respect to their 6 monthly statutory inspections. If over do not us until in date 2. Ensure any other lift equipment such a hoists, chain blocks, slings, goods lifts are in date with respect to their statutory inspections as detailed on the written scheme of examinations (WSE)	If it cannot be confirmed any equipment is compliant then put out of use until it has been viewed or tested by a competent person
Water Hygiene (Legionella)	1. Continue to flush hot and cold water taps as per the water log book 2. Ensure the water legionella testing is in date and will still be in date when school is back to normal operations	A mothballing of the hot and cold water systems is not normally required if the systems is going to out of use for less than a month and is still left operational i.e. hot water heaters/calorifiers are on and water temp is above 60^{o}C. Beyond this the whole system will require a clean and disinfection. If the water risk assessment has identified known problem areas, then these need to be addressed. Identify the sources of risk and prepare and implement a scheme to prevent and control the risk. Keep records of all checks and reviews of the scheme.

3.4 Energy

As a result of reduced operations you will need to undertake a number of things to close down your school buildings to ensure they are secure, safe and as efficient as possible during the, as yet, unknown period of closure.

It is clear that each school may be undertaking a different level of closure depending on the cover they are providing for vulnerable children and those of key workers therefore the below guidance tries to provide assistance for all schools.

Areas of the school to be closed:
If parts of the school need to remain open then identify parts of the school that are the easiest to keep secure, safe and heated.

Heating:

For parts of the school that are closed we suggest you reduce the heating set point to 10 degrees for the time being. In some schools this may not be possible as the buildings will not have heating zones. In these cases, then if the complete site is closed or just the office is open then reduce the set point to 10 degrees and use localised heating for the limited staff when required i.e. electric blow heater or oil radiator. If you or your site manager are unsure how to do this then please contact Peter Greaves on (peter.greaves@northyorks.gov.uk 01609 535733).

Heating oil supply:

If you are dependent on oil for heating then please check oil tanks to ensure there is enough to keep going through the closure, at least a quarter of a tank. As an example sites generally use 50% of their total annual oil in winter, 25% in Spring and Autumn, so a school with four deliveries a year would need one delivery between March and June. This is based on normal operations if the heating is running at 10 degrees as recommended then less will be used.

Utility bills and meter reads:
Please ensure all bills are paid on time and if possible meter reads undertaken as normal, this will help to ensure reduced estimated bills. If possible read your meters at the end of the last working day and enter reading on SystemsLink

General switch off:

- Please unplug laptop charging trolleys.
- PC units and Screens should be switched off at the plug where required.
- Standby electricity on whiteboards and other electrical equipment will not be required. Again turn off at the plug.
- Turn off laptop charging trolleys if your school has them.
- Check lighting in cupboard areas to ensure nothing is left on.
- Turn printers and copiers off as per manufacturer's guidance.
- While it is unlikely we will get very cold weather at this time of year please do be aware that if we do to undertaking regular checks within the school during the course of extreme cold weather, to ensure that the heating system is operational and that there is no evidence of either frozen or leaking pipework.

4.0 Further Support and Guidance

If you need any further guidance please contact the Hard FM team who are part of the Property Services department within Strategic Resources Directorate.

Mechanical & Electrical support –

Alan Callear – alan.callear@northyorks.gov.uk Office: 01609 535053 Mob: 07989 402352

Darren Foster – Darren.foster@northyorks.gov.uk Office: 01609 797908 Mob: 07973 731666

Phil Park – Philip.park@northyorks.gov.uk Office: 01609 797913 Mob: 07973 731638

Building Fabric / structure support –

Mark Bennett – mark.bennett@northyorks.gov.uk Office: 01609 797912 Mob: 07973 731280

Paul Connelly – paul.connelly@northyorks.gov.uk Office: 01609 535006 Mob: 07973 635570

Bev Davies – bev.davies@northyorks.gov.uk Office: 01609 797908 Mob: 07973 731666

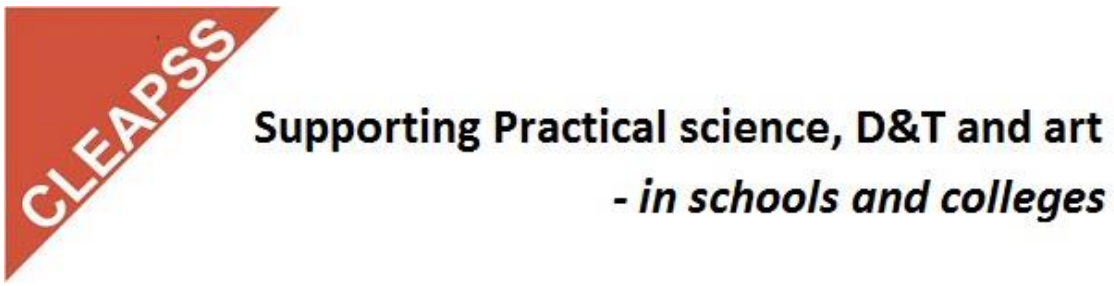
Jon Jackson – jon.jackson@northyorks.gov.uk Office: 01609 797911 Mob: 07976 360868

General assistance –

Emma Brand – emma.brand@northyorks.gov.uk Office: 01609 535674

Mike Adams – Michael.adams@northyorks.gov.uk Office: 01609 536687 Mob: 07980 013836

Appendix 1 Prep your D&T department for shut down



Prep your D&T department for shut down

Before leaving your department for the school holidays (or other reasons) we advise that you go through the following check list.

General Checklist

- Are windows shut?
- Are cupboards that are the responsibility of technicians locked?
- Have teachers been reminded that they are responsible for the security of their own rooms?
- Have you taken appropriate Hot or Cold Weather Precautions for your chemical store?
- Are all water taps turned off?
- If appropriate, are mains gas, electric &/or water turned off?

DT & Art Rooms:

- At the end of term, make sure all the power is locked off to the rooms, plugs are switched off and isolators are off.
- Cleaners and site staff will still have access to the rooms, so it is important that tool stores and equipment are locked to ensure that access is limited.
- Consider the working temperatures in your practical spaces, over the winter months your rooms may get cold, and you will probably need to keep windows and external doors closed. Try to make sure you have good ventilation, without causing issues for other areas.

- Some of the equipment and materials used in practical areas will need to be put away or decommissioned for the winter break.

- Make sure that things are stored safely, don't place heavy items on high shelves.
- Remember to take care of flexes and plugs, when storing electrical items, cables should not be tightly wound around equipment as this can damage the insulation.

- In the last week of term, it would be a good idea to lightly oil bare metal surfaces of machines and hand tools. This can be done with thin lubrication oil, such as 3 in 1, and wiped onto the surface using a piece of rag. Prior to oiling machines, ensure that the machine is off and the power is isolated. The person doing this should wear disposable chemical resistant gloves or barrier cream. The rag should be disposed of in a sealed plastic bag and then placed in the bin as normal waste.

- 3d printers and other equipment that heat plastic should have any filament or material removed from the heated components. For 3D printers, this will mean heating the hot end and then removing the filament.

- Laser cutter beds should be cleaned and any small bits of material vacuumed out of the cutting area.

Food Tech Rooms

- Ovens and grills should be cleaned and fridges emptied and wiped clean. Freezers may still have food in them, but ideally these should also be emptied and defrosted and then cleaned.

- All food storage areas should be cleared and cleaned, to help to keep pests at bay.

- Food room sinks can have remnants of food waste in the traps, so it's a good idea to run the taps for a few minutes after the last lesson.

- Is electrical equipment turned off unless intended to be left on?

- If Appropriate - Make sure that plugs for the Fridges & Freezers have labels on them clearly indicating that they should not be switched off and check with facilities manager that power to the department will not be turned off over the holidays.

Textiles Rooms:

- Some textiles equipment will need servicing and lubricating, check with the manufacturer's instructions, or contact your service engineer for further advice.
- Are chemicals stored safely and correctly?
- Are gas cylinders stored securely in their normal place?
- Are valuable and desirable items stored securely?

Chemical Storage

In addition to the advice in E262 Storage of chemicals consider the following;

If the department has a chemical store, arrange for it to be kept cool.
If there is no air con in your store and you know the temperature in the store rises if the weather gets hot, **increase the ventilation if possible**.

• **Consider alternative storage arrangements** - is there is a secure, cool, well-ventilated space available, at least over the holiday period when the chemicals do not need to be accessed frequently?

• **Arrange for someone to check the store regularly**. If this will be a non-DT or science colleague, make sure they know what to look out for and what to do if problems are spotted. Warn the colleague not to put themselves at risk. **Leave the CLEAPSS *Helpline* number and instructions** (including a copy of the E Hazcards and GL120 About Hazcards section E).

• **Place bottles of volatile chemicals in a large volume of water** e.g., in a bucket or bowl. Protect the label by keeping the water level below the label or placing the bottle in a plastic bag.

• **Take care when entering the store after a period away, particularly if the weather has been hot.**

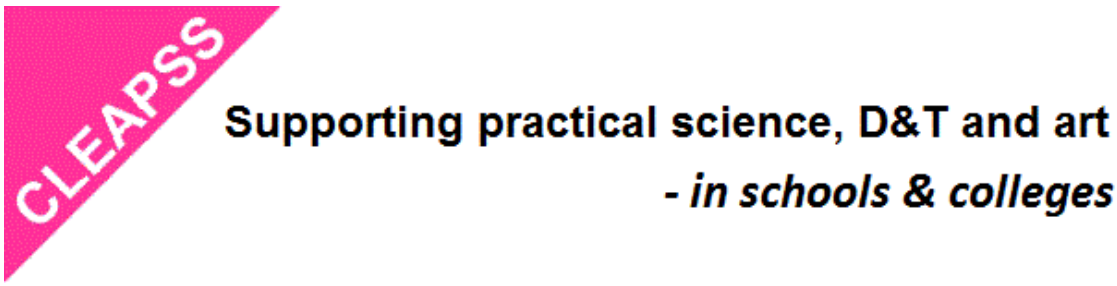
Returning after the holidays - Stay safe when checking your chemicals
When you come back to school after the holidays, keep safe while you check that chemicals in the store are ok.

There may have been a spill or leak so keep safe by reading GL246 before going in, and check GL247 and GL252 for further details and advice on what to look for.

Be particularly careful if the weather has been hot or you are unsure that the store is ventilated well.

If you need any help or advice contact the CLEAPSS Helpline https://science.cleapss.org.uk/helpline/

Appendix 2 Prep Your Science Department For A Shutdown



Prep your Science department for a shut down

Before leaving your science department for the school holidays we advise that you go through the following check list in addition to the end of the day *'aide memoire*' from DL248b Running a Prep Room

Check List:

Have animals and plants received adequate attention?

Is electrical equipment turned off unless intended to be left on?

- Make sure that plugs for the Fridges & Freezers have labels on them clearly indicating that they should not be switched off.
- Check with facilities manager that power to the department will not be turned off over the holidays

Are all gas taps turned off?

Are all water taps turned off?

If appropriate, are mains gas, electric &/or water turned off?

Are laboratory benches, floors and sinks free of broken glass?

Are laboratory benches, floors and sinks free of spilled chemicals?

Has completed practical equipment been removed from laboratories?

Are chemicals stored safely and correctly?

Are gas cylinders stored securely in their normal place?

Are valuable and desirable items stored securely?

In the prep room, are windows shut?
Are cupboards that are the responsibility of technicians locked?
Have teachers been reminded that they are responsible for the security of their own laboratories?

Have you taken appropriate Hot or Cold Weather Precautions for your chemical store?

Returning after the holidays - check your chemicals

When you come back to school after the holidays, keep safe while you check that chemicals in the store are ok.

There may have been a spill or leak so keep safe by reading GL246 before going in, and check GL247 and GL252 for further details and advice on what to look for.

Be particularly careful if the weather has been hot or you are unsure that the store is ventilated well.
If you need any help or advice contact the CLEAPSS Helpline
https://science.cleapss.org.uk/helpline/

Hot Weather Precautions

Make sure your stored chemicals are safe in hot weather - Action Plan

1. **Arrange for the Chemical store to be kept cool.** If there is no air con in your store and you know the temperature in the store rises if the weather gets hot, **increase the ventilation if possible**.

2. **Consider alternative storage arrangements** - is there is a secure, cool, well-ventilated space available, at least over the holiday period when the chemicals do not need to be accessed frequently?

3. **Arrange for someone to check the store regularly**.

- If this will be a non-science colleague, make sure they know what to look out for and what to do if problems are spotted.
- Warn the colleague not to put themselves at risk.
- **Leave the CLEAPSS *Helpline* number and instructions** (including a copy of the E Hazcards and GL120 About Hazcards section E).

4. **Ventilation**: A rate of 2 air changes per hour, maintained 24/7 normally suffices to vent hazardous fumes and maintain an even temperature.

- Use any blinds that are fitted and ensure the ventilation system is working.
- If your store is liable to become hot, the ventilation may be deficient.
- Call a ventilation engineer to check it and quote for improvements.
- Failure to maintain adequate ventilation can lead to overheating and a build-up of fumes which can cause ill-health and corrosion.
- If the fan is on a time switch, lengthen the 'on' periods if possible or keep it switched on all the time.

5. **Volatile chemicals** (those that evaporate easily) are most at risk.

- **You might detect a stronger smell in the area or notice plastic bottles bulging.** For example, highly flammable liquids and also other non-organic volatiles such as concentrated hydrochloric acid, nitric acid and ammonia might be affected.
- **Place bottles of volatile chemicals in a large volume of water** e.g., in a bucket or bowl. Protect the label by keeping the water level below the label or placing the bottle in a plastic bag.
- Try to keep the store as cool as possible and don't put yourself at risk by going in if the level of fumes is higher than usual or you suspect that something has leaked.

6. **Take care when entering the store after a period away, particularly if the weather has been hot.**

- If you detect problems and there is a risk that fumes have built up, ONLY if it is possible to ventilate the store **safely**, do so.
- consider evacuating any areas at risk
- Contact the CLEAPSS *Helpline* **for advice on 01895 251 496.**

Appendix 3 Legionella Flushing Guidance

Flushing

When flushing showerheads and taps that haven't been used in the last seven days or more it is the first quantity of water that will pose the greater risk. Once this water has been run through the risk of exposure is reduced. Therefore, it is the first 30 seconds to 1 minute when the risk is at its greatest and it is important that staff minimise the risk of contact with spray from outlets during this first flush through.

Wash Hand Basins, Sinks and Bath Taps

Run water from both hot and cold supplies and warm if on a single mixer tap, through tap(s) for 5 minutes. The water should be run slowly to avoid spray for 1 minute and can then run faster for a further 4 minutes.

Showers

Run water from both hot and cold supplies and warm if on a single mixer tap, through the showerhead for 5 minutes.

Showerheads are designed to produce spray and they should be run through in a bucket of water, or through a flushing "sleeve" or plastic bag so that no spray escapes into the atmosphere. Once bag / bucket are full they should be gently poured away.

In the absence of a bucket of water or sleeve take shower head off the bracket, and if possible lay it in the bath or shower tray before turning the taps on very low so that water flows gently out of it. If this is not possible point it into the base of the shower tray or bath.

Showers Fixed Head

If the showerhead is fixed and no bag can be used, run the shower head very slowly for 1 minute and move away from the shower then increase the flow for a further 4 minutes.

Toilets

Flush twice to circulate fresh water through the system and empty the cistern, ensuring the toilet seat lid is down. If no toilet seat fitted flush and move away from toilet.

Clos-o-mat bidet-toilet

Should be switch off at the wall if they are to be not used for a week or more so warm water is not left standing in the cistern. The flushing is then the same as a normal toilet.

Garden / Garage / Boiler Room /Outside Tap (Bib Tap)

The water should be run slowly to avoid spray for 1 minute and can then run faster for a further 4 minutes.

Flushing the hose pipe, remove nozzle / spray gun from the end of hose and slowly run off water to a drain or safe area for 5 minutes then refit nozzle and use.

Never leave a hose pipe connected to the bib tap, empty the water out of garden hoses after use and do not leave full hoses in the sun after use.

Washing Machines & Dishwashers

Set program to Rinse Cycle and operate.

Record Keeping

It is important that the flushing/purging regime is recorded using the log sheet in water hygiene log book.

If there are no record sheets left, Use any available paper and note:

1/ Date, 2/ Location of Tap, Shower etc., 3/ Persons name doing the flushing.

4/ Note any faults or failings and report to line manager.

5/ File sheet in Water Hygiene Logbook

All above actions to be recorded on weekly flushing sheet and kept within

Water Log book for inspection.