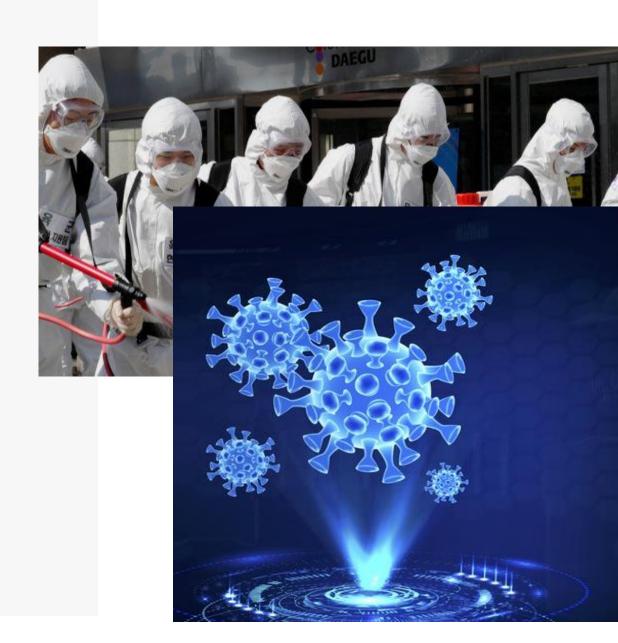
# **CORONAVIRUS**

(COVID-19)

CHAMBERLAINE CLEANING SERVICES Ltd.
PREPAREDNESS & RESPONSE

Viruses emerge or re-emerge (Pandemic level)



# UNDERSTANDING NOVEL CORONAVIRUS (COVID-19) IDENTIFIED IN WUHAN, CHINA 2019.





# PREVIOUS INFECTIOUS DISEASES AND OTHER PUBLIC HEALTH HAZARDS







# LOGISTIC OPERATION:

Chamberlaine Cleaning Services, Local Capability & Support Cells.



<u>Logistic Operation</u>: – Chamberlaine Cleaning Services recognise that arrangements, coordination, prioritisation and acquisition of supplies is paramount for the effective delivery of our service and we should provide special attention to the management of those supplies already at hand or in the pipeline. This will be crucial to support the business continuity of our clients and the ability to meet their specific requirements in the event of exceptional circumstances.

Chamberlaine Cleaning Services Logistic Support Cells are plan, implemented and supported through the combined effort of top and senior management

#### The Logistic Support planning aim to:

- Conduct advance risk based planning, based on each specific Building /site and those of the neighbouring (near by contracts or small sites) requirements.
- ✓ Allocate key central sites and essential items.
- Oversee planning process including methods of acquisition, distribution and replenishment;
- ✓ Map local logistic capability
- ✓ Supervise any logistic support arrangements;
- ✓ Coordinate the activation of the arrangements in the event of an emergency





# PRIORITISING AND ACQUISITION OF SUPPLIES

For exceptional events and emergencies Chamberlaine has classified supplies into two groups.



# <u>Supplies classification in exceptional events :</u>

- 1. Common supplies used in a number of daily operations e.g. microfiber cloths, core cleaning products, hand towels, etc;
- 2. Items that are unusual or of a unique nature specific to the type of incident

### Our strategic objectives is to prioritise the requirement for particular items.

- For the support of business continuity of our clients.
- Meet our clients specific requirements
- For the avoidance of injury or ill health;
- To mitigate the worst effects of the denial of essential services and
- To deal with consequences of those emergencies.



## **CONSIDERATIONS:**

When prioritising the acquisition of supplies.



Consideration of logistic operations has been appraised under Chamberlains risk based approached and we will prioritised according to information from Government and professional sources. Planning and projections will be done based on this information and previous case studies as a framework for deciding what supplies might be required.

This will be supported by robust financing arrangements, which have been pre-agreed with our partners.

#### Considerations as to whether to acquire an item/service might include:

- The assessment of the likelihood and impact of an emergency;
- ✓ The need for reducing the time spent on acquiring the item during an emergency;

#### The spectrum of options across our partners and supply chain includes:

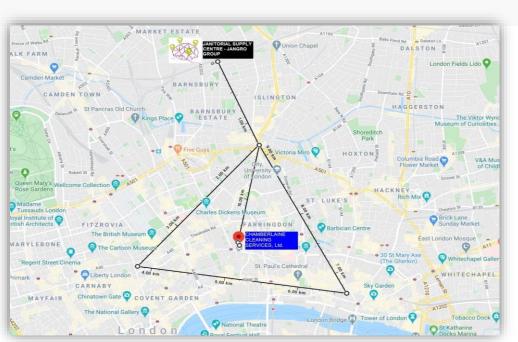
- **a. Supply Chain resources** Businesses, and organisations.
  - a. 'Just in time': i) adhoc sourcing Direct main Supplier provides reassurance that the items will be provided on demand.
- **b.** Virtual stockpiles Prearranged "call off" for specific supplies.
- **c. Physical stockpiles** We use those for custom-made items, or those with long lead times.

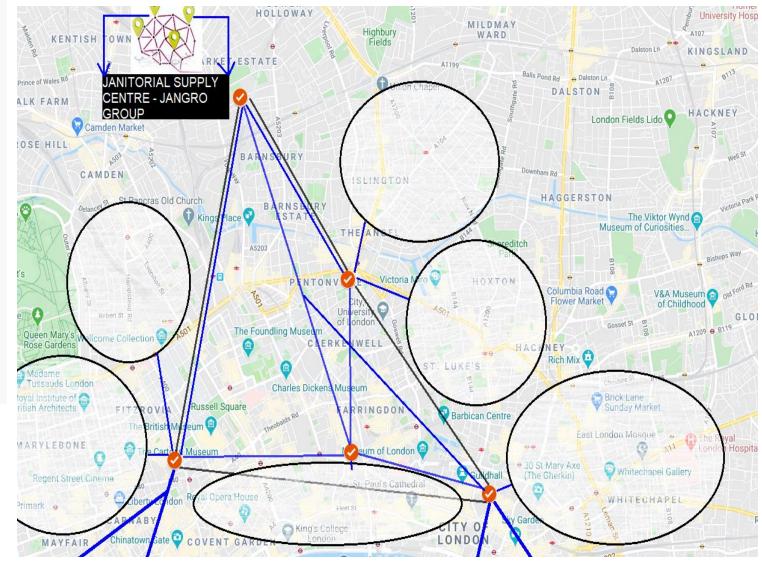




# SUPPLY CHAIN & SUPPORT CELLS

- ✓ Chamberlaine cleaning Services logistic support cells have been mapped to take into account strategic routes and enhance the availability to communicate, transport and delivered resources across all our sites
- Our cells are resilient to weaknesses on national transport infrastructure and bottlenecks
- ✓ Full coverage of our portfolio will be guarantee (Zone 1&2).







# WORK FORCE & TEAM DEPLOYMENT





Our specialist service team APC have the experience and equipment to support and carry reactive emergency operations (within hours), they have their own mean of transport including a Van and can deploy **40 skill** and experienced operatives who are highly flexible and can operate in crucial areas across central London using state of the art equipment and products.

To support our containment effort, team members from our (partime) division can get involve at different stages and at different levels to provide and effective response to any of our client's preventive requirements. A well trained workforce of (60 +) operatives (London based) can be deploy within 24hrs to support our containment efforts (High touch point areas disinfection and detail cleaning) after office hours.

Members of the APC team will provide highly valuable technical assistance to these operatives and assist in areas such as best practices, product knowledge, application, supervision, needs assessment, procedures, transfer knowledge etc.





# **ASSESSMENT:**

The focus is the collection and analysis of detailed epidemiological information.





- ✓ <u>Containment Action:</u> Preventative arrangements will be activated to ensure all the necessary detailed and targeted cleaning, will be delivered. This will be decided and customised on the specific surveillance delivered at each client premises. This will be according to the recommendations of The Worldwide Cleaning Industry Association (ISSA), WHO, .GOV.
  - ✓ Incident site risk assessment: assess what equipment is needed and what cleaning and disinfection solutions to use.
- ✓ <u>Cleaning Disinfection & Sterilization:</u> Where there is a confirmed contamination (<u>Person testing Positive</u>), a Decontamination stage will be carried out with Biocides meeting BS EN1276 or Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics

#### **Decontamination Stages**

- 1. **Disinfection:** Use of selected chemicals and physical means to reduce the number of microbes including transmissible agents (such as fungi, bacteria, viruses, and all bacterial spore forms), to such levels that they will not cause infection.
- 2. **Sterilization:** Use of state of the art equipment and products to reach in "deep and remote" areas to eliminate all remaining forms of microbial life,

#### **Products Such as:**

- ✓ Formula 429
- ✓ Jangro foaming bactericidal cleaner
- ✓ Jangro virucidal cleaner
- This will aim at "knocks down the viral or bacterial contamination".



# CONTAINMENT ACTION

# **High Touch Point Areas Disinfection**

Preventive cyclical cleaning across communal areas such as:

- ✓ Stair cases hand rails
- ✓ Lifts panels & hand rails,
- ✓ Call buttons,
- ✓ Door hand plates,
- ✓ Toilet entrance doors
- ✓ Toilet cubicles doors
- ✓ Etc..

# PRODUCTS Lacto Des Jangro foaming bactericidal Cleaner Jangro Virucidal Cleaner













#### Formula 429 – EN Standards

#### FOR PROFESSIONAL USE ONL

The following shows the significant tests relevant to our industries involvement in the Formula 429 technology. We have listed these as a guide to the quality and performance this product offers to all professionals in the antimicrobial industry i.e. Healthcare, Bio hazard, Deodorisation, Restoration etc.

#### EN Standard

#### Significant EN Tests of the Formula 429 Technology Include;

Test Method	Test Virus	Independent Testing Centre
EN1276:1997	Bactericida; Suspension Test P.aeruginosa ATCC	BluScientific, Glasgow, UK (2005
5442.	E.coli, S.aureus, Enterococcus hirea.	CCFRA, Camden, UK (2002)
	E.Coli, Mycobacterium smegmatis(TB stinulent),	Institut For Microbiology Uni.
	Staphylococcus aureus(MRSA)	Erlangen

See seperarate pdf. for full details on dilutions of different specific tests et

EN1500 Hand sanitising non pathogenic E.coli According to Bush et al (1980)
Pseudomonas aeruginosa, Enterococcus hirea, aureus, MRSA (This refers to the hand sanitising Formula 429 technology only and is not the same as the Formula 429 antimicrobial surface and fogging product)

#### A different test was also carried out to test efficacy of pathogenic micro organisms

EN13704	Bactillus subtilis ATCC, Bacillius stearothermophilus	Alcontrol Lab
	Clostridium difficile	
EN1650	Candida albicans, Aspergillus niger	Alcontrol Lab
EN13696	Blue Scientific Specific Feline Coronavirus, Feline Calcivir	rus (human norovirus Surrogat
21.12000	Diac Scientific Specific Femile Corollaria asia cinic Cineria	us (nummi norovirus s

EN14476: 2007-02 influenza A virus HINI (Swine) CCFR, Camden, UK

MRSA Study	Formula 429 Technology established a
EMRSA15)	protective shield against MRSA.
EMRSA16)	The shield showed long lasting effect over several
EMRSA	Weeks.

Independent Study Gemmell et al 2006 6 mths. @ Glasgow Royal Infirmary.

Regular use showed significant reduction in incidents

See separate document for European Conformit



### **CLEANING DISINFECTION & STERILIZATION: (Confirm Positive cases)**

When a person has tested positive for Corona Virus at any of our client locations. We will immediately escalate our cleaning process into the decontamination phase.

- 1. <u>Decontamination</u> The focus in this phase would be special management arrangements with our specialist team (APC). This will have as a main aim to maintain essential services for our clients, on a robust contingency plans.
  - a. Load reduction: Items may need to be removed altogether because of bio contamination.
  - b. Disinfection: This will be done with EN1276 Biocides products, (wet cloth, bucket) and finish wit clean dry towel
  - Jangro foaming bactericidal Cleaner or......
  - > Jangro Virucidal Cleaner
- 2. <u>Sterilization:</u> This will be done with **FORMULA 429** Biocidal Product Directive 98/8/EC through Fogging or Electrostatic process
  - Formula 429 standards: EN1500, EN13704, EN13696 EN1650, EN14476.
  - Fogging Machine or Electrostatic Sprayer
  - Post site assessment / ATP test: (at client request)
- 3. <u>Post site assessment / ATP test (at client request):</u> ATP bioluminescence meters, measure the concentration of ATP as relative light units (RTU) in organic material and living cells, making it a perfect indicator when trying to determine if a surface is clean or not.
- **4.** <u>Containment stage:</u> Introduce extra cleaning activities of high touch areas to interrupt any possible reoccurrence or transmission.
- If the situation is judged to have worsen such as (wide community transmission) by lead Government data expert, Departments and Agencies. Chamberlaine will follow Government Emergencies protocols.





# **EQUIPMENT & PROCESS**

- ✓ Use of dedicated equipment in the area such a Fogging machine or Electrostatic Sprayers
- ✓ Dispose of single use equipment as per waste category
- ✓ If using Fogging Machine or Electrostatic Sprayers Isolate Smoke detectors if possible. Alternatively cover detectors with plastic cup.
- ✓ We recommend more frequent cleaning of commonly used hand-touched surfaces and of anteroom/lobby areas (at least twice daily)
- To ensure appropriate use of PPE and that an adequate level of cleaning is undertaken. Our team(s) "when possible" will approach the cleaning of washrooms and toilet area as a separate regime, to that of common areas
- ✓ If the same cleaner/cleaning team is responsible for cleaning the communal area and wash room area, the communal areas will be decontaminated first
- ✓ Disposable equipment will be used for Sterilization process. This equipment will be disposed according to waste category B.







## ELECTROSTATIC SPRAYER CLEANING DISINFECTION

## What is electrostatic cleaning & disinfection?

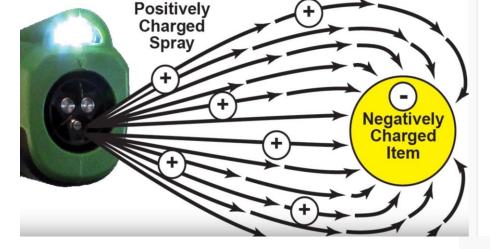
Electrostatic is the word used to describe the process of incorporating an electrical charge into a liquid. Why is this done? When electrostatic technology is applied to a liquid, the droplets created when sprayed become positively charged, enabling them to "stick to a surface".

This unique technology enables to disinfect awkwardly shaped objects or hard to reach places, the nature of the mist allows it to coat surfaces evenly, and envelope objects—even if the mist is only sprayed from one side. After the spray is applied, the sanitizing agent works to disinfect the covered surfaces. For this reason, electrostatic spray is an excellent solution for germ and contaminant ridden areas.

## Liquid Adhesion & Coverage

Using the electrostatic sprayers will enable a **quick and effective Chemical or Biocide application**. As fully-charged droplets hit the surface they create an even spread. Particles hold their cationic charge for approx. 2-3 seconds – preventing drips. This allows the solution to cover hidden and shadowed areas, and also enables to cover a large area in a small amount of time.

Effectively against viruses, fungi, spores and bacteria such as Influenza, MRSA, C.difficile, Norovirus







# FOGGING STERILISATION TECHNIQUE

## What is Fogging

Fogging is a sterilisation technique that creates a dry or wet mist which eliminates a high percentage, if not all, pathogens that cannot be reached by conventional cleaning. It is long established and recognised method of sterilising an entire surface area, including walls, ceilings, furnishing, carpets and floors. The methods involved in the Bio-fogging process have been used and developed over a number of years.

# How effective is Fogging

Fogging is an extremely effective sterilisation method. Biocides are used in the process and is proven to work effectively against viruses, fungi, spores and bacteria such as Influenza, MRSA, C.difficile, Norovirus.



# WASTE

- ✓ Large volumes of waste may be generated by frequent use of PPE; advice from the HESEQ Dept should be sought if in doubt on how to manage this
- ✓ From Areas of Confirm or positive cases of Corona Virus (COVID-19) all waste will be dispose as clinical waste Category B.





# ARTICLES, FIXTURES & FURNITURE FROM SITES WITH POSITVE CONFIRMED CASES



## **INSTRUCTIONS TO OPERATIVES**

#### IF requested by the client to disposed items or furniture

- ✓ All articles must be treated as waste class B
- ✓ Label with biohazard label
- ✓ Wearing recommended PPE, with the additional measure of use of double-gloves
- ✓ The article(s) should be double-bagged inside the office of area of work by staff member(s). Tide the first bag, spray disinfectant and put the first layer of outer gloves inside the second bag or outer bag and close tide the bag.
  - ✓ Once taken to the waste room, the operative(s) should then wiped or sprayed the bag with disinfectant and....
  - ✓ On a separate bag the Operative(s) should remove their remaining gloves and PPE. Close bag and then wiped or sprayed with disinfectant
  - ✓ Use hand gel sanitiser once you have place all the items inside the Class B bin
- Any equipment taken in to the room which must be subsequently removed, needs to be disinfected prior to leaving the site, in a similar approach to Articles (as described above). This can be achieved by removing the outer layer of gloves and then using appropriate disinfectant to clean it surfaces including wheels.
- ✓ Bagged Articles for waste should be hand delivered to the waste room by someone who understands the nature of the hazard. Chutes <u>MUST NOT</u> be used
- Transport of articles or furniture between site and process plant will be in accordance with Category B transportation regulations.



# PERSONAL PROTECTION EQUIPMENT



# Putting on PPE

- Overalls.
- 2. FFP2 or FFP3 respirator and fit check.
- 3. Eye protection, ie goggles or face shield.
- 4. Disposable gloves Vinyl & Black Rubber

The order given above is practical but the order for putting on is less critical than the order of removal given below.

## Removal of PPE

PPE should be removed in an order that minimises the potential for cross-contamination. Before leaving the area or office gloves, Orveralls and eye protection should be removed (in that order, where worn) and disposed of as category B waste (also known as infectious) waste. After leaving the area, the respirator can be removed and disposed of as clinical waste. The order of removal of PPE is suggested bellow, consistent with WHO guidance, as follows:

- 1. Peel off gloves and overall together and roll inside out. Dispose in clinical waste.
- 2. Perform hand hygiene.
- 3. Remove goggles from behind and place them inside container with virucidal or disinfectant for 5min.
- 4. Remove respirator from behind and dispose in clinical waste.
- 5. Perform hand hygiene.





- Avoid contamination of self, others and the environment.
- Remove the most heavily contaminated items first.

Remove gloves and gown:

- peel off gown and gloves and roll inside, out;
- dispose of gloves and gown safely.



Perform hand hygiene.



- Remove cap (if worn).
  - Remove goggles from behind.
  - Put goggles in a separate container for reprocessing.



Remove respirator from behind.



5 Perform hand hygiene.



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Thank You

