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NADCA: Education, Safety, Fall Tech, & White Paper Committee's SME CVI Exam Rewrite

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- ✓ This presentation is not intended to be a comprehensive program covering all aspects of this topic.
- ✓ All participants are encouraged to read and follow applicable standards, codes and regulations related to this topic.
- ✓ The views and opinions following are the presenter's opinions and not necessarily the official position of the National Air Duct Cleaners Association.

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SPECIALIZED JOBS AND CLEANING UNIQUE FACILITIES

- Food Manufacturing
- Hospital
- Industrial / Manufacturing
- Pharmaceutical

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RULES OF ENGAGEMENT

Documents you may have to review & receive training onsite

- Health questionnaire = have you been ill?
- GMP Documents – site or area specific
- NDA = Non-Disclosure Agreement
- Digital Media Policies = pictures, communications, devices
- Safety requirements = hard hat, glasses, cut sleeves etc.
- Emergency procedures = accidents, fire etc.
- Equipment policies = lifts, vacuums etc.
- Site Hazards = what is being produced, drugs etc.

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COMMON REQUIREMENTS

- No jewelry or piercings
- No loose clothing/street clothing
- No street shoes = change inside before entering production areas
- No street clothes = provided jackets, suits etc.
- No fake nails, eyelashes, hair, makeup
- No cologne, perfume, heavily-scented deodorant or scented body lotion (or other fragrances)
- No cuts or open wounds
- No eating, gum, tobacco products
- No ceramics or glass

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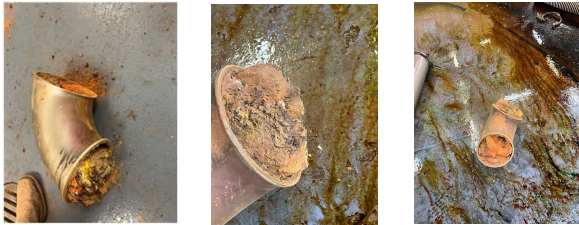
FOOD MANUFACTURING / PROCESSING

- Food grade coloring plant.
- Exhaust system for mixing stations.
- 100% blocked in some areas.
- Break pipes apart.



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FOOD MANUFACTURING / PROCESSING



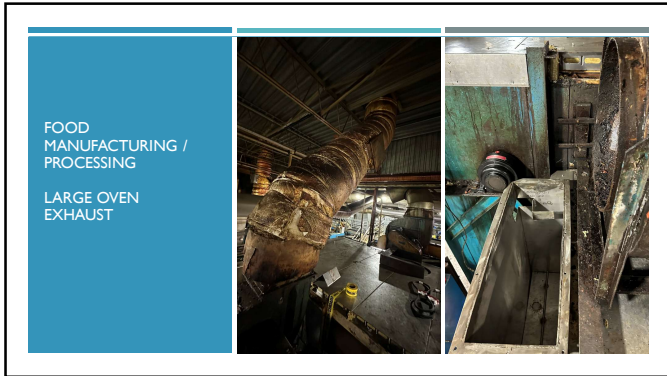
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FOOD MANUFACTURING / PROCESSING

- Hot water soak
- Hot power wash
- Air chisel
- Hammer drill bit



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FOOD MANUFACTURING / PROCESSING

- 1 Create a poly slide to direct water and grease to a trash can
- 2 Scrape by hand
- 3 Gas hot power washer hoisted to roof – this is a huge facility
- 4 Power wash, degreaser, rotary brush
- 5 Power wash

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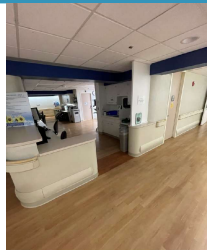
HOSPITAL

- Several meetings before work can begin
- Depending on what type of areas you will be working in, meeting with nursing staff
- Meet with Infection Prevention specialist – they may have to review your work plan and sign off
- Additional containment will be needed
- Work areas and containment may be inspected during your project
- Nothing inside an active hospital is easy

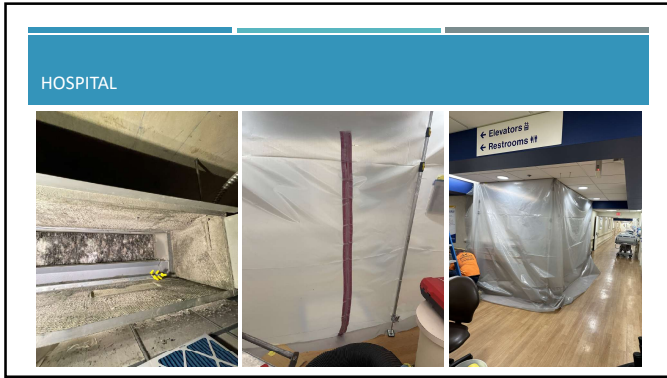
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HOSPITAL

- Occupied 4th floor, nursing station
- Noise was a concern – project was overnight
- Cleaning of One Fan Coil
- Any ceiling tile removed required containment
- We provided our work plan weeks before this
- IP produced a multi page spreadsheet for risk assessment before work could begin – 4 people had to sign this!
- IP inspected our containment before we were allowed to start work, posted a sign of approval



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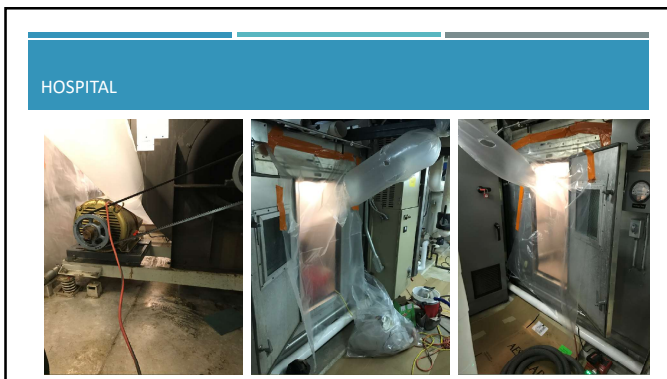


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HOSPITAL

- ⊕ Cleaning of 2 large air handlers that feed hospital surgery
- ⌄ IP wanted containment inside the AHU, separate the unit from the OA, RA and SA systems
- ⬇️ HEPA filtered air scrubbers, ducted to the outside of the work area – negative pressure
- 🚫 Poly barriers over doorways
- 🧑‍🔧 Crew wore full face HEPA filtered respirators, Tyvek suits, gloves etc

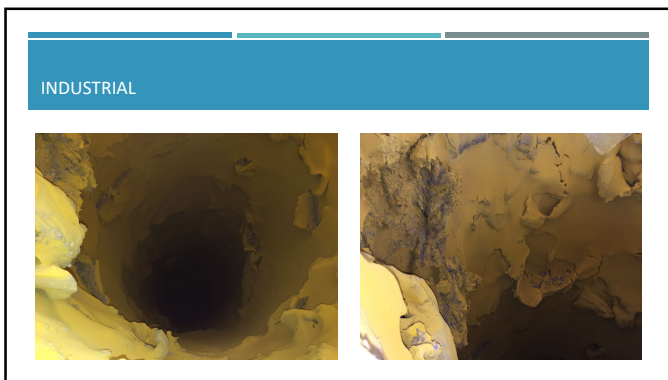
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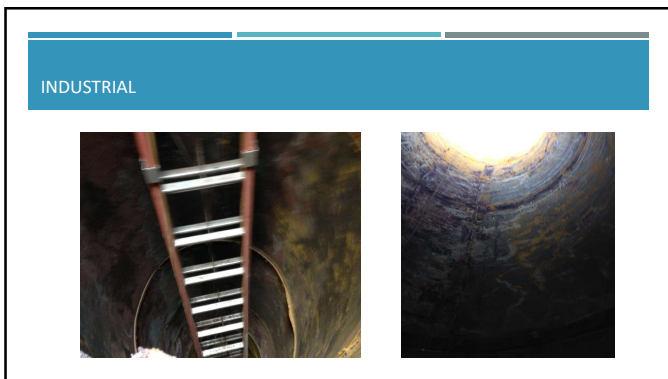
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INDUSTRIAL

WATER BASED PAINT, 2-3" THICK ON WALLS

CONVENTIONAL DUCT CLEANING TOOLS NOT EFFECTIVE.

AIR CHISELS, HAND SCRAPE.

PPE - EAR PLUGS, GLOVES ETC

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PHARMACEUTICAL

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PHARMACEUTICAL

- Large process exhaust duct
- 5' diameter, 200' long
- 20' in the air
- Contaminated with penicillin
- Life threatening environment

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PHARMACEUTICAL

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PHARMACEUTICAL

- Access openings installed under containment, negative air
- PPE – no exposed skin, supplied air for some
- Noncombustible, dangerous to breathe
- Decon shower after leaving duct and containments, in suits
- Hazmat vacuums utilized, bag all debris
- Site disposed of debris



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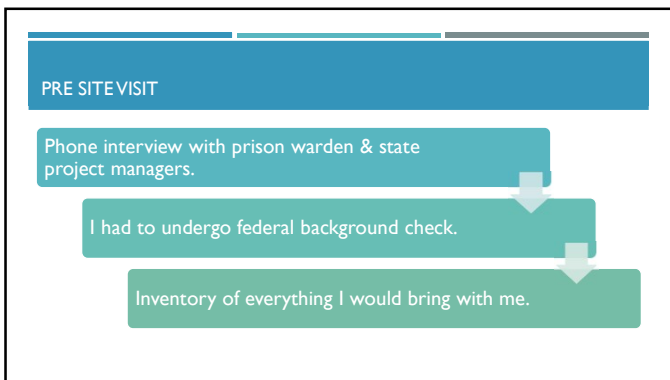


PRISON

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SITE VISIT

- Searched, drug dog passed by.
- Inventory of what I have on me, wallet contents etc.
- No cell phone allowed – put in metal box in security office.
- Personal escort assigned to me (armed guard).
- Ceiling hatches in many location secured by special fasteners.
- Steel bars inside large duct work in many locations.

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ITS EASY UNTIL IT ISN'T...

- Extensive check in / out process every morning and evening.
- Everything brought inside the gates needs to be inventoried twice a DAY!
- Counting of every single screw, metal patch, tools, equipment etc.
- Some tools where not allowed – knives of any kind.
- None of our vehicles allowed on campus – they provided a golf cart...
- ¼ mile from gate to cell block D, logistics mess.
- How do we eat? 15+ crew members.
- Unknown slowdowns – fights, inmate logistics.

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FIRST DAY OF WORK

7am check-in, search, drug dog, paperwork.	9am check-in complete, waiting to be escorted to our work areas.	10am finally get to work areas, Looking for guy with keys.....	10:30 am get access to mechanical rooms. Pack supplies up steps to mech rooms.
Clean until about 11:30am, lunch.	Wait to get escorted from our area/building, crew eats, check in again.....	2pm resume work.	We ended up working 12+ hour days...

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WHAT THE MECHANICAL DRAWINGS TOLD ME

- Security bar locations, in large mains, exhaust, small supply air ducts going to cells.
- Security cages inside duct work – large mains in attic and exhaust ducts.
- Secure exhaust caps on roof – hardened, bulletproof, 10 ga welded, non removeable.
- Large AHU's served as exhaust during a fire – this was a fire, clean it all.
- Most of the HVAC system had interior fiberglass liner.

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WHAT WE DID NOT ANTICIPATE

- Working close to inmate population.
- Inmate logistics – if its shower day we can't work in that area, yard etc.
- Noise complaints.
- Complaints over the smell of paint – coating.
- Prison staffing issues.
- Prison not having secure fastener drill bit.
- Inmate issues over leaving their rooms so we could clean.

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QUESTIONS?

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