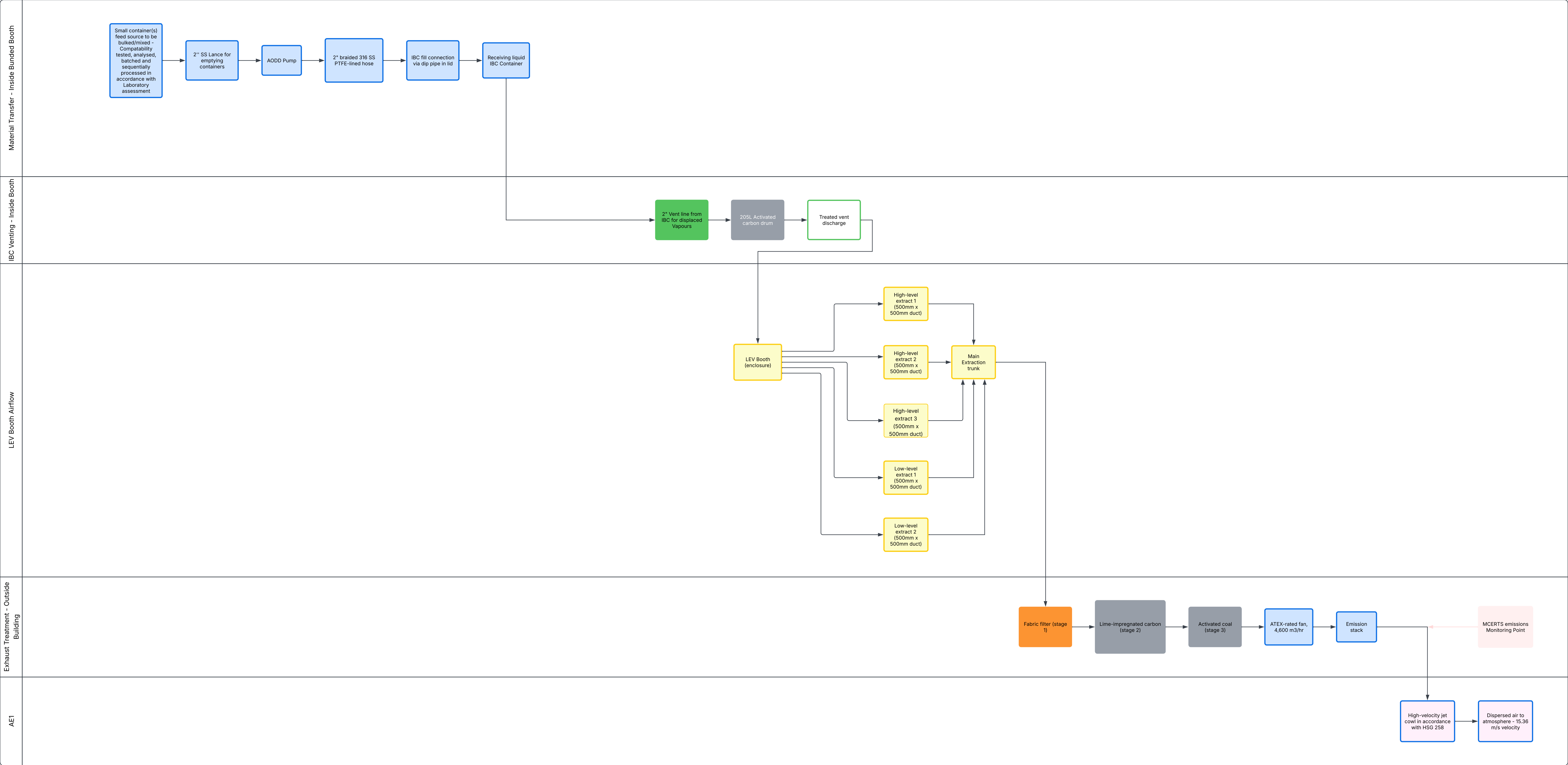


AODD Pump Transfer to IBC with LEV Exhaust

Owner: Stuart Frazer McNish

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Scope: This process covers pumping material from small containers into an IBC using an AODD pump and PTFE-lined transfer hose inside an LEV booth, including IBC venting through activated carbon drum within booth and then LEV exhaust filtration of entire booth through 3 stage air treatment process before discharge to atmosphere.



IBC Material Transfer, Venting, LEV and Exhaust Treatment Flow

Diagram Information

This diagram maps the process for transferring liquid into an Intermediate Bulk Container (IBC), venting and local exhaust ventilation (LEV) airflow, and staged exhaust treatment before atmospheric discharge. Key components: source containers and AODD pump, hoses and IBC fill, IBC headspace venting through activated carbon, LEV booth low- and high-level extracts collecting to an extraction trunk, staged exhaust treatment (fabric filter → lime-impregnated carbon → activated coal → ATEX fan → emission stack), and final high-velocity jet cowl discharge to atmosphere.

IBC Transfer, Venting and Exhaust Treatment SOP

- Start the transfer procedure at the Source small container(s).
- Prepare connections:
 - Connect small container feed to AODD pump suction. **Connect all Newson Gale Earthing equipment within cabinet to 1) IBC being filled 2) container being emptied. All pipework and pumps and earther to the main earth of the container. Newson Gale equipment should be checked before use**
 - Connect AODD pump discharge to 2" braided 316 SS PTFE-lined hose.
 - Secure IBC fill connection and install dip pipe in the IBC and vent line to carbon drum. **Install Handheld VOC monitor at exhaust of 205L carbon drum to monitor for VOCs and ensure efficacy of process**
- Begin pumping using the AODD pump via 2" lance
- Monitor IBC headspace and fill progress continuously.
 - If IBC has not reached target fill level:
 - Continue pumping.
 - Ensure IBC headspace venting remains open to vent line and LEV as required.
 - If IBC reaches target fill level:
 - Stop pumping, close all valves on fill lines to prevent spillages
 - Isolate and disconnect the hose.
 - Securely close the IBC.
- Vent management:
 - Route IBC headspace through the 2" vent line.
 - Pass vented air through activated carbon drum
 - If vent air is routed to extraction, send it to the LEV extraction system. Carbon drum should be in corner of booth at opposing end to operator
- LEV booth airflow operations:
 - Ensure the LEV Booth enclosure is operating with 500mm x 500mm ducting at each extract point.
 - Collect low-level and high-level extracts (each fitted with 500mm x 500mm ducting, including the additional high-level extract) into the extraction trunk.
 - Direct trunk flow to exhaust treatment stages.
- Exhaust treatment sequence:
 - First stage: Fabric filter.
 - Second stage: Lime-impregnated carbon.
 - Third stage: Activated coal.
 - Operate ATEX-rated fan to maintain required flow and safety compliance.
 - Direct treated exhaust to the emission stack.
- Final discharge:
 - Emissions pass through the high-velocity jet cowl to atmosphere for safe dispersion.
- Post-operation checks:
 - Confirm all hoses and connections are disconnected and secured.
 - Verify vent/drum and LEV system are functioning and filters/carbon stages inspected.
 - Record transfer quantities, vents routed, and treatment equipment status.
- If any abnormal condition or leak or elevated VOV readings are detected at any step, stop operations immediately and follow incident response procedures.

Generated by @Stuart Frazer McNish on July 23, 2026