**Safe Work Requirement**

Sandblasting, Painting and Grinders

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| PURPOSE Abrasive cleaning is an operation whereby grit, shot or metal filings are introduced into a pressurized stream of air via a hose and blasting nozzle, and cleans by impingement of abrasive material on metal surfaces thereby removing rust, scale or paint prior to repainting.  This method of cleaning creates a polluted atmosphere due to the production of coarse dusts from the abrasive material being used and the rust and scale residue from the material being cleaned.  Personnel engaged in this operation and personnel who could be affected by these operations, i.e. persons working in the area, must be protected from the pollution. Where practicable all personnel not connected with the operation should vacate the area.  The purpose of this instruction is to provide a regulation to identify and control the risk and hazard when the person operates sand blasting and grinders. SCOPE This instruction is applicable to all ECDC sand blasting and grinders operation. RESPONSIBILITY      Rig Manager The Rig Manager has overall responsibility for sand blasting and grinders operation and safety issues. This includes overall responsibility for ensuring the system is in place to provide the means of sand blasting and grinders operate and maintenance on the location.  The Rig Manager is responsible for implementing the approved sand blasting and grinders safety work instruction at rig site where work is carried out under their control. Additionally, they shall ensure that any subcontractor who working under their direction are fully follow this instruction. HSE Supervisor The HSE Supervisor shall assist the Rig Manager in ensuring all related personnel are trained in operating sand blasting and grinders.  The HSE Supervisor shall periodically verify the employee who operate the sand blasting and grinders are trained.  Provide advice on the use of all types of protective equipment. Operator The operator should have suitable experience in accordance with instructions.  Ensuring that safe working practices are being enforced at all times PROCEDURES AND GUIDELINES    Equipment In brief the abrasive cleaning equipment consists of:   1. Air Compressor 2. Feed hopper for abrasive material 3. Hoses of static dissipating type 4. Blasting nozzle, fitted with a failsafe device (dead man's handle). 5. Hood / Face shield complete with oxygen supply hose and filter.   The above equipment must be properly assembled and maintained. Connections must be securely fastened and these connections and hoses free from leaks. Precautions When operating abrasive cleaning equipment, it will be controlled by a Permit to Work and the area is to be roped off.  Before any abrasive cleaning operations commence, the air compressor, hopper, discharge nozzle and the surface to be cleaned shall be earthed to a common ground. This earthing shall be checked by a competent electrical person.  Where the work is being carried out under a work permit, the Supervisor in charge will inspect, the work area, equipment and material to be cleaned to ensure that the conditions specified on the permit have been carried out.  Abrasive cleaning shall not be permitted in the vicinity of ventilation air intakes, air intakes for turbines, internal combustion engines, electrical motors or switch gear, unless such equipment is first isolated and protected against contamination by the products of the cleaning operation. Protection shall also be provided for glass, light fittings, windows etc.  Adequate portable fire-fighting equipment shall be sited adjacent to the work area; personnel should be familiar with its use in case of emergency. Paint Spraying Adequate training and supervision of persons engaged in paint spraying is essential. This will not only be in consideration of the very expensive equipment involved and the obvious skill required, but in order to make the sprayer conscious of the personal dangers which could arise either by neglect or improper use of the equipment - or by the irresponsible actions of others. Precautions when Spraying  1. Provide adequate ventilation and means of escape in event of an emergency. 2. Ensure that surrounding areas are flame and spark free. 3. A respirator mask must be worn at all times to avoid the inhalation of substances which are harmful to health. For work over prolonged periods or in a highly toxic atmosphere, breathing apparatus will normally be essential. 4. Care must be taken to avoid the hands or fingers being placed in front of the jet, as the force at the tip can penetrate the skin. 5. If any spray gets into the eyes, flood copiously with water immediately and obtain medical attention. 6. Use safety locking device on trigger when changing tips or leaving the gun under pressure. 7. Make sure the apparatus is earthed as static can build up in the line. 8. Use the correct solvents for cleaning equipment, as wrong solvent can cause precipitation of the resin in the paint. 9. Do not leave apparatus full of paint for any length of time. 10. Do not use cleaning solvents for thinning paint, as these are usually slower in evaporating and cause incorrect drying and chemical reaction in the paint. 11. In the case of any splashes of paint or solvents on the skin, wash the skin immediately with soap and water. |