

Mistras Group, Inc. | Services Division
Pollution Control and Waste Management

100-SP-028 Original

May 1, 2016

Management Approval

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Issue Authorization

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Pollution Control and Waste Management

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Pollution Control and Waste Management

1.0 Purpose / Scope

To establish Mistras Group, Inc. guidelines for maintaining a pollution control and waste management process that reduces waste in the workplace and minimizes environmental impact.

2.0 Responsibility

- 2.1 The Corporate Compliance Officer is **Chris Smith**. He is responsible for the administration of this program and has full authority to make necessary decisions to ensure success of the program. All Mistras employees are responsible for safety at all times. Mistras has expressly authorized this person to halt any company operation where there is danger of serious personal injury.
- 2.2 Each Mistras location General Manager shall be responsible for implementing this procedure at their locations and all field site locations under their control.
- 2.3 Mistras supervisors and or lead technicians shall be responsible for ensuring that the processes outlined herein are carried out on a daily basis at the work locations.
- 2.4 Mistras technicians shall be responsible for carrying out their assigned duties in accordance with the intent of this procedure. Technicians shall be trained in the use of the procedure.

3.0 Material Handling

- 3.1 The goal of any material handling process will be to handle and / or move any material without spills, leaks or other contamination. The following processes can help achieve this goal.
- 3.2 Receiving Material – Check for open damaged or leaking containers, proper labels on shipments, check expiration dates of materials, check contents against purchasing documents to assure the correct product is received.
- 3.3 Transferring Material – Check the transfer lines for correct connections, tight seals, corroded or broken components. Use the proper tools for transporting or moving materials (fork lift, dolly etc.) to avoid damaging the container. Check for drainage from hoses, and check location of sewers and drains to prevent any accidental run-off from reaching them.
- 3.4 Storing Material – Federal regulations require secondary containment to keep hazardous materials from escaping. This can be drum containers w/liners, catch basins etc. Store materials in approved cabinets. Keep storage areas clean, well lit and ventilated. Separate materials that may chemically interact. Don't tip, tear puncture or break containers while storing them.

4.0 Waste Generating Production Processes

- 4.1 The processes that Mistras has identified as generating significant amounts of waste are:
 - 4.1.1 Radiography / Film Processing – both manual and automatic film processing generate heavy metal waste products (silver)
 - 4.1.2 Liquid penetrant testing – When using the water washable penetrant method, some penetrant products need to be re-claimed or treated prior to disposal.
 - 4.1.3 Refinery operations that require employees to wear disposable (TYVEK or similar) outer garments, gloves or other such items. These garments, when soiled with refinery product can sometimes be classified as hazardous waste and must be disposed of properly.

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- 4.2 Disposal of the above must be performed in accordance with Federal, State and Local regulations. These regulations must be identified for each location where work is performed. In general, the following should be considered for reduction and containment of waste products.
- 4.2.1 Film Processing – Assure that the silver recovery system is installed and operating properly. At most sites, this can be performed by an outside vendor contracted to provide the service of monitoring and removing the waste by-products. When manual processing solutions are required to be changed, the solutions must be returned to the laboratory for processing. On-site users of chemical solutions must monitor the rinse water effluent for local compliance. If the local level of compliance cannot be maintained, no on-site disposal is authorized. Used film, exposed or un-exposed, must be separated and disposed of properly.
- 4.2.2 Penetrant system materials must be identified as to their disposal status. Most penetrant manufacturers can provide the required documentation for disposal of their product. This documentation must remain on-file at the facility of use. When remedial processing of the materials is required, the systems used shall be maintained and monitored for compliance.
- 4.2.3 Waste disposal for other types of contaminated or hazardous materials must be identified as the occasions arise. For work performed at a customer location, the customers program for disposal must be followed. At the very least, separation of hazardous and non-hazardous materials must be undertaken to avoid accumulation and disposal of the materials in the wrong manner.

5.0 Safe Practices

- 5.1 Waste is everyone's responsibility. Everyone at Mistras must:
- 5.1.1 Recognize the waste that is generated in the workplace.
- 5.1.2 Know the proper waste disposal locations and practices.
- 5.1.3 Maintain the labeling of hazardous waste at its source.
- 5.2 Waste must be labeled to prevent cross-contamination and reduce the disposal and treatment costs.
- 5.3 Waste must be segregated, usually at its source.
- 5.4 Maintenance of equipment must be maintained such that process waste is not allowed to escape.
- 5.5 Frequent inspection of facility equipment is required.
- 5.6 A reporting system must be in place to notify appropriate personnel.

6.0 Training

- 6.1 All Mistras employees shall receive instruction in this procedure and the specific material handling and waste disposal processes in use at their facility.
- 6.2 Records of employee training, including testing as required, shall be maintained on file for the duration of the employee's employment. See Appendix 1

Pollution Control and Waste Management**Appendix 1: Training Log**

We, the undersigned, affirm that we have received and fully understand training in the pollution control and waste management procedure 100-SP-028.

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