

Wellman International Limited		Standard Operating Procedure	
Section: General		Rev: 01	Date: 24/08/21
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PROCEDURE FOR ENVIRONMENTAL SITE CLEANING

Purpose

To define the cleaning and housekeeping practices required to maintain the WIL site in good environmental condition & so as to prevent uncontrolled discharges capable of resulting in an environmental incident or a breach of IPC licence requirements.

Scope

The procedure, in conjunction with relevant cleaning and auditing records listed in the related documents section of the procedure, details the cleaning and housekeeping arrangements in place for all areas of the site. These cleaning and housekeeping arrangements allow WIL to minimise the risk of uncontrolled discharges from various sources including;

- PET raw materials (flake, fluff, chip etc)
- Litter and packaging materials
- Oils, greases and chemicals

The procedure also details the arrangements in place for the assessment of environmental risk in relation to uncontrolled discharges. The procedure does not detail the arrangements in place at WIL for periodic drain maintenance, drain surveying or storm / foul water monitoring in accordance with the IPC licence. A number of separate procedures are in place for these tasks.

The procedure applies to all persons detailed in the "Responsibility" section of the procedure.

Responsibility

Department Managers
Raw Material Controller
Assistant to the Manufacturing Manager
Team Leaders
Process Operators
General (Cleaning) Operators
Craft Personnel
Grounds Person
Continuous Improvement Leader

Related Documents**Daily Weekly Cleaning Forms / Records**

Sort and Prep Daily / Weekly Cleaning Record	QC 67
Spinning Daily / Weekly Cleaning Record	QC 68
Finishing Daily / Weekly Cleaning Record	QC 69
MSC Area Daily / Weekly Cleaning Record	QC 70
Grounds Person – Routine Cleaning Record	QC 71
Warehouse Daily/Weekly Cleaning Record	QC 72

Product Change Cleaning Forms / Records

Finishing Product Change Clean-down Sheet	QC 59
Finishing Hygiene Clean-down Sheet	QC 60
Spinning / PM / Product / Colour Change Record	QC 109
Batching Cleandown Sheet for Raw Material Control	QC 110

Procedure

Cleaning and housekeeping are split down into a number of different areas. See below.

Environmental Risk Assessment (See also Appendix 1)

The environmental risk posed to areas due to the potential discharge of various sources (see scope) is risk assessed. This risk assessment ensures that each potential risk areas is evaluated for required risk controls and that clear cleaning and housekeeping arrangements are prioritised and in place for all areas.

A risk assessment has been completed to assess areas that may pose a risk of potential uncontrolled discharge – this may be PET raw material, litter / packaging or oils, greases and chemicals.

Risk scores are rated from a minimum value of 4 and a maximum value of 12 based on four different criteria, each of which can be awarded between 1 (low) and 3 (high) points.

The scoring criteria in the risk assessment are;

- Likelihood of uncontrolled discharge
- Quantity of Material likely if discharge occurs
- Proximity to Drain or Site Boundary
- Ease of Detection if discharge occurs (*i.e. how long before noticed*)

Areas that receive a high score are subject to more regular review, cleaning and housekeeping arrangements than areas that receive a low score. All areas are cleaned periodically by the persons noted in this procedure.

Note: where cleaning records have a combination of different task frequencies these shall be defined on the record itself (*i.e. daily vs weekly vs monthly etc*)

1. Sort & Prep

Risks Identified – PET Raw Materials, flakes, chip & fluff, packaging materials & litter

The routine daily / weekly cleaning and housekeeping required for Sort & Prep is outlined on QC67 “Sort & Prep Daily / Weekly Cleaning Record”. This includes cleaning for the areas listed on the table below. This cleaning is completed by Process Operators in the Sort & Prep area. This record is reviewed, signed and verified on a weekly basis by the Raw Material Controller, with the completed records held in Raw Material Controllers Office. The frequency of each item listed in the table is detailed on the check sheet (QC67).

Where deemed necessary, standard operating procedures have been devised to provide additional instruction in relation to the required cleaning / housekeeping required as well as any HSEQ issues of particular note.

Sort & Prep	Related SOP
Silo Farms area & around (including under cyclones)	No SOP required
Roof Space above Unit 3 Dryer	No SOP required
Unit 3 Dryer	SP/038 “Cleaning Out & Around the Dryer”
Macawber Room	SP/057 “Cleaning the Macawber Room”
Granulator Room	SP/052 “Housekeeping in the Granulator Rooms”
Fluff Room	SP/055 “Cleaning Silo 33 Fluff Room Tunnel”
Saxlund, Silos 22 & 23	No SOP required
Type A Room	No SOP required

2. Warehouses 301, 302 & 307***Risks Identified – PET Raw Materials, flakes, chip & fluff, packaging materials & litter***

The routine general daily / weekly cleaning and housekeeping required for WIL managed warehousing is recorded on QC72 “Warehouse Area Daily / Weekly Cleaning Record”. This includes cleaning for the areas listed on the table below. This cleaning is completed by the Day Operator in the raw material control area. This record is reviewed, signed and verified on a weekly basis by the Raw Material Controller, with the completed records held in Raw Material Controllers Office. The frequency of each item listed in the table is detailed on the check sheet (QC72).

Where deemed necessary, standard operating procedures have been devised to provide additional instruction in relation to the required cleaning / housekeeping required as well as any HSEQ issues of particular note.

Warehouse	Related SOP
Warehouses	WH/015 “Housekeeping for Warehouses 301, 302 & 307”
Area around Compactor	No SOP required
Raw Material Off Loading Bays	No SOP required
Flake Pit area & around	No SOP required

3. Spinning

Risks Identified – PET Raw Materials, flakes, chip & fluff, chemicals

The routine general daily / weekly cleaning and housekeeping required for Spinning is recorded on QC68 “Spinning Area Daily / Weekly Cleaning Record”. This includes cleaning for the areas listed on the table for Spinning Area Day Operators. This record is signed and verified on a weekly basis by the Assistant to the Manufacturing Manager, with the completed records held in Spinning Team Leader (Days) Office.

Additional cleaning is also carried out by Extrusion, Quench and Take-Up Operators in accordance with the small sub-tables in this section for extrusion, quench and take-up respectively. The daily/weekly cleaning arrangements for Extrusion, Quench and Take-Up are detailed further in the relevant Quality Responsibility procedures (SG/144, SG/143 & SG/142 respectively).

Where deemed necessary, standard operating procedures have been devised to provide additional instruction in relation to the required cleaning / housekeeping required as well as on any HSEQ issues of particular note.

This cleaning is scheduled for completion by Spinning Area Day Operators (Ref. QC68)

Spinning (Days)	Related SOP
Clunker / Raw Material Skip & Hoist area (outside)	No SOP required
Roof area at cyclones and monomers	No SOP required
Clunker Waste Bin (inside)	Clunker Hoist SOP
General Trash Waste Bin	No SOP required
Sharps Bins	No SOP required
Clunker Skip	No SOP required
Recycle Bin on Quench	No SOP required
Take-Up floor washing	No SOP required
Quench floor washing	No SOP required
Extrusion floor washing	No SOP required
Plenum floor washing	No SOP required
Main & Back Stairs	No SOP required
Finish Mixing Room	No SOP required
Rosin Dryer Room	No SOP required
Spinning Roof Area	No SOP required
Ultrasonic Fresh Water	SG/001 "Operation of Schwing Oven, Hypox Ovens and Ultrasonic Baths"
Oven Chambers & Water Tank	SG/001 "Operation of Schwing Oven, Hypox Ovens and Ultrasonic Baths"

This cleaning is scheduled for completion by Spinning Shift Operators (Extrusion). See also SG/144 "Extruder Operator Quality Responsibilities".

Spinning (Extrusion)	Related SOP
Screens	SG/018 Screen Changing
Sweep / Tidy	No SOP required
Removing Polymer under Filter Heads	SG/023 Removing of Polymer from under the Screen Filter Head
Fluid Beds	No SOP required

This cleaning is scheduled for completion by Spinning Shift Operators (Quench). See also SG/143 "Quench Operator Quality Responsibilities".

Spinning (Quench)	Related SOP
Monomers	SG/011 "Cleaning Debris from the Monomer System"
Sweep / Tidy	No SOP required
Power Wash Quench Screens	SG/139 "Washing & Drying of Quench Screens"
Vacuum Cabinets	No SOP required

This cleaning is scheduled for completion by Spinning Shift Operators (Take-Up). See also SG/142 "Take-Up Operator Quality Responsibilities".

Spinning (Take-Up)	Related SOP
Wash and Empty Finish Tray & Tanks	No SOP required
Sweep / Tidy	No SOP required
Clean T-Up Wall	No SOP required
Delap Lube Rolls	SG/105 "Working on & Isolation of Lube Rolls"
Delap Supply Rolls & Reels	SG/012 "Delapping Supply Rolls & Reels"

4. Finishing

Risks Identified – PET spun fibres, PET raw material passing through to Sorting, chemicals, packaging

The routine general daily / weekly cleaning and housekeeping required for Finishing is recorded on QC69 “Finishing Area Daily / Weekly Cleaning Record”. This cleaning is completed by the Finishing Area Day Operators. This includes the cleaning listed on the table below. This record is signed and verified on a weekly basis by the Assistant to the Manufacturing Manager, with the completed records held in Spinning Team Leader (Days) Office.

Where deemed necessary standard operating procedures shall be devised to provide additional instruction in relation to the required cleaning / housekeeping required as well as on any HSEQ issues of particular note.

Finishing	Related SOP
Wash Floor From Creel to Cutter	No SOP required
Wash Floor in Baler Area	No SOP required
Wash Floor at Loading Bays & Ramp	No SOP required
Wash Floor in Finished Fibre Warehouse	No SOP required
Empty Trash Bins	No SOP required
Power Wash AFM Area	No SOP required
Wash the back of Lines A, B & C	No SOP required
Wash the Lines from Dip Bath to Crimpers including Canopies	No SOP required

Additional instructions on the routine cleaning within the Finishing area are available in FG/117 “General Cleaning in the Finishing Department”.

5. Maintenance (MSC)***Risks Identified –Chemicals, oils & greases, packaging***

The routine general daily / weekly cleaning and housekeeping required for Maintenance is recorded on QC70 "Maintenance Area Daily / Weekly Cleaning Record". This includes the cleaning listed on the table below. This cleaning is completed by the nominated MSC Craft Person. This record is reviewed, signed and verified on a weekly basis by the MSC Engineer or a Craft Leader with the completed records held in MSC Secretary's Office. The frequency of each item listed in the table is detailed on the check sheet (QC70).

No specific standard operating procedures are deemed necessary to provide additional instruction in relation to the required cleaning / housekeeping. See QC70 for details.

MSC	Related SOP
Clean up and sweep around Main Workshop general area	No SOP required
Empty scrap metal bin	No SOP required
Empty general bin	No SOP required
Clean up and sweep Machine Workshop area	No SOP required
Clean up and sweep around Welding Bay	No SOP required
Clean up and sweep around Old Workshop area	No SOP required
Empty general bin at Stores	No SOP required
Clean up and sweep around Electrical Workshop	No SOP required
Clean up and sweep around Blade Sharpening Workshop	No SOP required
Clean up and sweep around Baler Workshop	No SOP required
Clean up and sweep around FLT Workshop	No SOP required
Clean up and sweep around Band Saw and Steel Storage Area	No SOP required
Clean up and sweep around Carpenters Workshop	No SOP required

In addition to this routine cleaning, each Craft Person shall be responsible for “cleaning up as they go” during maintenance work and ensuring areas are clean and tidy after maintenance work is completed. Each Craft Person is also responsible for keeping their toolboxes clean and tidy so as to prevent any risk of product contamination or potential environmental discharge.

6. Grounds & General Yard Areas

Risks Identified – PET Raw Materials, flakes, chip & fluff, packaging materials & litter

The routine cleaning and housekeeping required for the Grounds area is listed on QC71 “Grounds Person Routine Cleaning Record”. This includes the evaluation and completion of the cleaning tasks listed on the tables below. This checksheet also involves the inspection, and where necessary, the cleaning of road gullies. These gullies are screened in all locations where a reasonably foreseeable risk of raw material deposition is present. This protects against ingress of raw material.

When cleaning has been completed the Grounds Person shall sign and date QC71 each week before returning the record to the Manufacturing Manager each week for verification. Completed records are held in the Spinning Office.

Grounds	Related SOP
Smoking Area Cleaned & Bin Bags Replaced	No SOP required
Internal and External Car Parks Cleaned & Bin Bags Replaced	No SOP required
Effluent Plant Checked	No SOP required
Wash Clarifier	No SOP required
Cut Grass	No SOP required
Maintain Shrubs and Hedges	No SOP required
Roadway and Yard area cleaning	No SOP required <i>See record QC71 for list of areas</i>
Storm drains & grids cleaning	No SOP required
Weed control spraying	No SOP required
Power wash external walkways	No SOP required
Oil Interceptor	No SOP required <i>See record QC71 for location</i>
Storm Drains visual check (including road gullies)	No SOP required <i>See record QC71 for road gullies</i>
Boundary Fence main entrance to Mullagh site boundary at Silo Farm	No SOP required

6. Ongoing Monitoring of Cleaning Standards

A range of HSEQ audits are in place that regularly assess the performance of the cleaning and housekeeping systems in effect at WIL. This includes;

- Weekly schedule of HSEQ audits (Ref. procedure GE/021)
- ISO audits including monthly ISO 14001 environmental audits

Auditing of Site Boundary

An audit of the site boundary adjacent to the raw material control area is completed on a weekly basis to confirm that no traces of fluff are evident (*main site entrance to site boundary opposite silo farm*). This is recorded on QC71 as is completed during the weekly Grounds cleaning and road gully inspection.

Revision History

Revision Number:	Revision Date:	Details of Change(s):
00	24/02/20	<ul style="list-style-type: none">• New procedure detailing key inspection & cleaning practices identified from an environmental perspective
01	24/08/21	<ul style="list-style-type: none">• Updated to reference revised scoring system, and Appendix 1 added• Section of auditing site boundary updated

Operation Cleansweep Raw Material Source Identification & Priority Control Assessment						
Source	Likely Cause of Spills at this Source	Likelihood (1 - 3)	Quantity of Material (1 - 3)	Proximity to Drains / Boundary (1 - 3)	Ease of Detection (1 - 3)	Total Risk Rating
Conveyance Systems from Sorting to Spinning	Leaks in pipes, pipe blockages, corrosion, process failure, poor housekeeping, availability of suitable cleaning equipment	3	3	2	3	11
Cyclones on Spinning Roof	Blocked cyclones, blocked airveys, incorrect settings on airvey system fans, poor housekeeping, availability of suitable cleaning equipment	3	3	2	3	11
Cyclones above Unit 3 Dryer	Blocked cyclones, blocked airveys, incorrect settings on airvey system fans, poor housekeeping, availability of suitable cleaning equipment	3	3	2	3	11
Silo Farm General	Leaks in pipes, blocked airveys, jammed outfeed augers, silos bridging, poor housekeeping, availability of suitable cleaning equipment	2	3	3	2	10
Spinning Tower Roof General	Jammed tube chains, leaking pipes, poor housekeeping, Rosin Dryer Inlet Filters, Unit 2 infeed hopper, availability of suitable cleaning equipment	2	2	3	3	10
Raw Material Off Loading in the Yard	Damaged packaging, badly loaded transport equipment, material spillage during off-loading, poor housekeeping, availability of suitable cleaning equipment	3	3	3	1	10
Raw Material Off Loading Bays	Damaged packaging, badly loaded transport equipment, material spillage during off-loading, poor housekeeping, availability of suitable cleaning equipment	3	3	2	1	9
Clunker Skip Area	Overfilling of waste skips, incorrect disposal of materials, poor housekeeping, availability of suitable cleaning equipment	3	2	2	1	8
Compactors - External Area	Damaged compactor equipment, incorrect disposal of materials poor housekeeping, contractor intervention, availability of suitable cleaning equipment	2	1	3	2	8
Flake Pit Area	Poor housekeeping, availability of suitable cleaning equipment	3	2	2	1	8
Fluff Room	Leaks in pipes, airvey blockages, overfilling of fluff room, poor housekeeping, availability of suitable cleaning equipment	2	2	2	2	8
Recycled Clunker Storage Area	Overfilling storage bunker, loading of clunker, poor housekeeping, availability of suitable cleaning equipment	2	2	1	1	6
Bulk Chip Off Loading Area Silo Farm	Fill connections loose, removing container liners after filling, poor housekeeping, availability of suitable cleaning equipment	2	1	1	2	6
A Type Silo (Silo 32)	Leaks in pipes, blocked airveys and cyclones, poor housekeeping, availability of suitable cleaning equipment	1	1	2	2	6
Maintenance Workshops	Chemical / oil spill, metal swarf or dust released from grinding etc	1	1	2	2	6
Main Roadway Around Plant	Spillage during waste removal, poor standard of waste removal equipment, overloading of waste equipment, poor housekeeping, availability of suitable cleaning equipment	1	1	2	1	5
Bicomponent Bulk Off Loading Area	Fill connections loose, removing container liners after filling, poor housekeeping, availability of suitable cleaning equipment	1	1	1	2	5
Front Yard	Poor housekeeping, external movement of raw material & masterbatches, availability of suitable cleaning equipment	1	1	2	1	5
General Plant Area (Spinning)	Chemical / finish spill, internal spillages of spun fibre or raw material being transferred to Sorting	1	2	1	1	5
General Plant Area (Finishing)	Chemical / finish spill, internal spillages of spun fibre or raw material being transferred to Sorting, packaging material	1	2	1	1	5