

ANNEX II

Compliance Monitoring Summary Sheet in accordance with Article 26 of Regulation (EU) 2022/1616 Abbreviations used in this document in accordance with Regulation (EC) No 2023/2006:

QA: Quality Assessment
SOP: Standard Operating Procedure
SOP code: a SOP code is comprised of two numbers, the number of the SOP and the number of the document in which it is described in the format SOPNr – DocNr; the document number shall correspond to the document number listed in section 2.3, the SOP number to the numbering system of the recycler.

1. SECTION 1: IDENTIFICATION

The numbers (RIN, RFN, RON, RAN, NTN) referred to in this section shall correspond to the numbers in the Union Register laid down in accordance with Article 24 of Regulation (EU) 2022/1616

1.1 Identification of the recycling installation

Installation name	Plasgran Limited T/A AMCOR Circular Polymers (Formerly Berry Circular Polymers)
Applied recycling technology in accordance with Annex I	CleanStream® Technology
EU Register number (recycling installation number, 'RIN')	RIN UNI-2K8-0F
Facility Address	Units B&C, Ashbourne Drive, Leamington Spa, Warwickshire, CV31 3SS
Recycling Facility Number ('RFN')	RFN UNI-2K8-0IR
Contact details	Mark Roberts
Position/Role of contact persons	Sustainability and Circular Economy Director
Relevant national register numbers, if any	
Notification date (Article 25(1)(a))	6th December 2022

1.2 Identification of the recycler

Company Name	Plasgran Limited T/A AMCOR Circular Polymers (Formerly Berry Circular Polymers)
EU Register number (Recycler Operator Number, 'RON')	RON UNI-963-00L
Address of the head office	Units B&C, Ashbourne Drive, Leamington Spa, Warwickshire, CV31 3SS
Contact details	Mark Roberts
Position/Role of main contact person	Sustainability and Circular Economy Director
Relevant national register numbers, if any	Company reg. number 03848053
Authorisation holder? (Yes/No/ Not applicable)	NOT APPLICABLE

1.3. Recycling process authorisation Decision or novel technology

A: identification of the authorisation Decision or novel technology used by the process that the installation applies:

EU Register number, i.e. Recycling Process Authorisation Number ('RAN'), Novel Technology Number ('NTN')	TBC
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B: authorisation holder or novel technology developer –

Name of authorisation holder* / of the technology developer** as applicable	Berry Holdings France SAS,
Address	Zone Industrielle du Douxmesnil Bp 6 766550 Offranville
Contact details	Mark Roberts
Position/Role	Sustainability and Circular Economy Director

1.4. Document references used by the European Food Safety Authority ('EFSA')

EFSA Question number	
EFSA Publication date of the opinion	
EFSA Publication number (output number)	
Confidentiality Decision number	
Confidentiality Decision date	

1.5. Additional responsible person(s) for the operation of the recycling installation

Name	Position/Role	contact details
Nigel Purcell	Plant Director	Nigel.purcell@amcor.com

2. Section 2: Operation of the recycling installation

2.1. Written Statements

2.1.1 Recyclers' statement explaining the production and quality of the recycled plastic

CleanStream® is a complete recycling process which takes in kerbside recovered waste PP.

The incoming material is subject to **several integrated decontamination steps**

- An extensive sorting process, *including the AI assisted identification of food use items* to ensure input streams are compliant with EU regulation 10/2011
- A Caustic hot wash at 85°C followed by a freshwater rinse and drying stage
- A further flake sort process
- A pre-extrusion and melt-phase de-volatilisation process
- Underwater pelletisation
- Solid-state volatile and semi-volatile removal process

The primary feed to the process is mixed colour short life polypropylene post-consumer pots, tubs and trays (PTT) which have been pre-sorted at a UK MRF or PRF and sourced from segregated recycling streams only. From this feedstock, the white and clear is sorted using 3 layers of automatic sorting, the final stage being an AI backed object recognition stage capable of identifying and removing non-food-use packaging and providing an infeed which is >95% food use packaging in their last application. All bottles are also targeted for removal. This is regularly verified by a hand sort to verify and ensure compliance.

This fraction is chosen for the following reasons:

- White and Natural items have low printing ink levels and any remaining inks which are present after washing are easy to see and remove.
- White and Natural materials do not contain compounded organic pigments that have a potential for decomposition.
- Bottles have a higher potential for misuse than trays so removing them reduces the risk of hazardous contamination.

This fraction is washed free of physical contamination using a four-stage washing process.

- After initial shredding, a float-sink separation removes free contaminants that have a density >1, including any non-target polymers, such as PET, PVC and other engineering materials. In addition, the shredding process allows for the removal of objects that may have been bound up with PP and missed by the optical sortation system.
- A high-intensity wet granulation stage removes surface contamination, paper labels and other labile contaminants.
- A hot chemical wash removes printing inks, and other direct decoration such as In-Mould Labels, and fats, oils and grease deposits.
- A final density separation stage and rinse removes any remaining sinking fractions, including PP with a density above 1 and so removes any filled PP with greater than 10% filler.

The washed flake is optically sorted to remove any remaining coloured polymer and flakes that still have a material amount of printing ink on them.

This flake is at least 99% plastic that meets food contact requirements of EU Regulation 10/2011 and, more than, 95% PP which was in direct food contact on its last use cycle. This can be demonstrated as even in non-food contact applications for single use packaging >90% of polymer used is virgin polymer which meets the EU regulation 10/2011 regulation.

This flake is processed in an Intarema / Refresher combination that degasses, filters and super-cleans the PP.

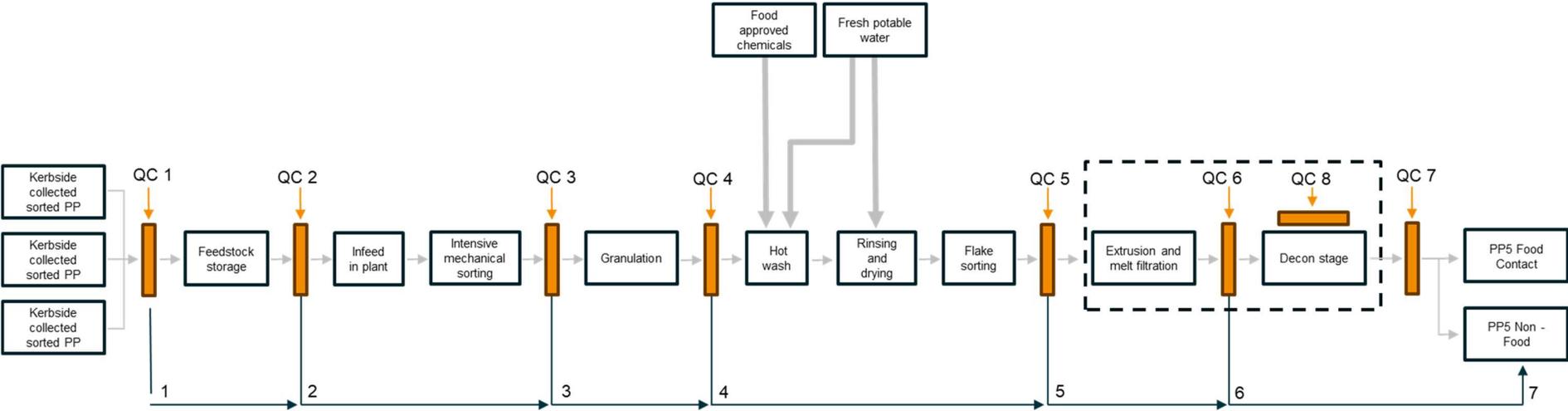
All output material is screened on a batch release basis using on-site analytical techniques, including XRF and GC-MS / GC-FID, for NIAS and specific contaminants (PAH / Phthalates / Heavy Metals) according to customer specific requirements and to demonstrate compliance to applicable packaging regulations.

2.1.2. Recycler's statement explaining correspondence to the authorised process

This section is applicable only to authorised processes.

2.2 Recycling operations at the recycling facility

2.2.1. Diagram of the main manufacturing stages carried out at the recycling facility (site diagram)



2.2.2. *Description of the main manufacturing stages carried out at the recycling facility and the streams connecting them*

Stage Number	Name	Description	Average Processed Tonnage per year
QC 1	Visual inspection on arrival	Visual inspection of load for composition of material and temperature check.	43,000
QC 2	Sampling and testing feedstock	Manual input analysis vs specification	43,000
QC 3	FDA sampling and testing	Food contact assessment	12,800
QC 4	Input flake testing	Chemical testing of the input flake by GC-MS and HS GC-MS	12,100
QC 5	Wash water quality assessment	The determination of chemical oxygen demand (COD) in flake sample	10,509
QC 6	Testing of colour before refresher.	Testing of colour plaques by Spectrophotometer.	10,351
QC 7	Product testing batch release.	Releases in specification batches from USD hold. Changes the grade of out of specification batches.	10,351
QC 8	Erema and refresher monitoring	PCU temperature, Laser filter temperatures, pressure at de gasser, refresher temperature and air flow all recorded.	10,351

Stream Number	Name	Description	Average Stream size
1	Delivery	Movement of material from yard to feedstock storage area	43,000
2	Infeed	Movement of material from feedstock storage to sorting plant	43,000
3	sort/shred	Movement of material between sort and shredding via storage bunker	12,800
4	shred/wash	Movement of material between shredding and wash.	12,100
4	Flake sorting /extrusion	Movement of material between flake sorting and extrusion.	10,509
6	Move to refresher	Movement of material to either refresher or bags	10,351
7	Silo	Movement of material to finished product silo	10,351

2.3. Internal Documents

Document type	Document Number	Related production stage	Title	Description	Date, version, author
Production SOP	LS-EHS-SSW-137	Before in feed	Unloading and Stacking bales	Temperature and visual compositional checks before unloading	Author Jen Jonson Issue Date 06.02.2025 Issue 1
Quality SOP	SOP023	In feed	Sampling and testing feedstock	Describes the separation, mass balance and date recording of input materials	Author Maja Dzierzak Issue Date 14.11.2023 Issue 3
Quality SOP	SOP080	After first sort	FDA sampling and testing	Describes the testing to ensure >95% former food use.	Author Amy Markley Issue Date 21.02.2024 Issue 2
Quality SOP	SOP024	After shredding and granulation	Obtaining flake samples (before wash)	Obtaining flake for the chemical testing of the input material	Author Maja Dzierzak Issue Date 13.03.2023 Issue 2
Quality SOP	SOP001	After shredding and granulation	The determination of organic compounds concentrations in a Polypropylene bulk by liquid injection GC-MS in TIC.	This is the sample prep and GC characterisation of input material.	Author Omeed Karimi Issue Date 21.04.2023 Issue 2
Quality SOP	SOP055	After shredding and granulation	For the Identification of VOC compounds by Headspace Analysis	This is the sample prep and HS GC characterisation of input material.	Author Simon Weale Issue Date 26.11.2024 Issue 5

Quality SOP	SOP004	After shredding and granulation	The determination of element concentrations in a Polypropylene bulk sample	This is the sample prep and XRF characterisation of input material.	Author Omeed Karimi Issue Date 18.01.2024 Issue 2
Quality SOP	SOP026	After wash and second sort	Sampling from the bagging station	Obtaining flake for the chemical testing of the washed and sorted material.	Author Maja Dzierzak Issue Date 13.03.2023 Issue 1
Quality SOP	SOP013	After wash and second sort	The determination of chemical oxygen demand (COD) in flake sample	Extraction and analysis of flake for quantified chemical oxygen demand (COD).	Author Zeeshan Waseem Issue Date 17.07.2023 Issue 4
Quality SOP	SOP030	After wash and second sort	Determination of colour	Determination of colour L a* b* c* h* by spectrophotometer	Author Maja Dzierzak Issue Date 17.02.2023 Issue 4
Quality SOP	SOP025	Final product	Obtaining PP5 pellet sample from refresher autosampler	Collecting homogenised sample of the final product. This is representative of the whole batch.	Author Maja Dzierzak Issue Date 13.03.2023 Issue 4
Quality SOP	SOP021	Final product	Measurement of Melt Flow Index (MFI) by Zwick A-flow	Testing samples for Melt flow index.	Author Zeeshan Waseem Issue Date 25.04.2023 Issue 1

Quality SOP	SOP022	Final product	Notched Izod impact strength test	Notched Izod impact strength test	Author Martins Odigue Issue Date 07.06.2023 Issue 2
Quality SOP	SOP018	Final product	Density measurement of polymer samples	Density measurement of polymer samples	Author Maja Dzierzak Issue Date 06.07.2023 Issue 2
Quality SOP	SOP020	Final product	Determination of Flex Modulus	Determination of Flex Modulus	Author Maja Dzierzak Issue Date 06.04.2023 Issue 1
Quality SOP	SOP027	Final product	Tensile Strength Test	This method covers stress at yield and elongation at break.	Author Todd Davey Issue Date 02.11.2023 Issue 2
Quality SOP	SOP019	Final product	Differential Scanning Calorimetry (DSC) testing of polymer samples	Calculation of the ratio of PP and PE by DSC	Author Simon Weale Issue Date 25.08.2023 Issue 2
Quality SOP	SOP065	Final product	Checking the temperatures of the Erema.	PCU temperature, Lazer filter temperatures, pressure at de gasser, refresher temperature and air flow all recorded.	Author Maja Dzierzak Issue Date 15.03.2024 Issue 1

2.4. Batch definitions

Batch type	Internal Batch name	Stream/QA No.	Definition/Description	Typical size range	Traceability rule
Entry Batch	Feedstock delivery	1.1	Bale delivery	16-22 tonnes	Documents from suppliers are uploaded to operational management
Input batch	Unwashed flake	4.1 -4.4	58.5 tonne batches of unwashed wite flake matched to 50 tonnes of output after losses	58.5 tonnes	The consumption of the batches is controlled by operational management
Output batch	pellet	7.1 -7.13	One full silo of finished pellet	50 tonnes	Material movement in controlled by operational management

2.5. Process diagram of the decontamination installation

See appendix 1 and 1A

2.6. Control of critical decontamination operations

Critical operation (and ref to EFSA opinion)	Control criterion	Measuring or Control Instrument (reference to 2.5)	Short description of corrective actions if control rule is not met	SOP code (SOPNr – DocNr)
Input Composition Min 95% food-use	7 day rolling average >95%	Manual Sampling and Sorting	Determine root-cause. Isolate production and classify process output as non-conforming until condition is met	SOP080
Washed Flake fails COD		COD <100mg/l	Determine root-cause. Isolate production and classify process output as non-conforming until condition is met	SOP013
Extrusion output fails on colour	$\Delta E > 2.5$ to target	Spectrophotometer	Divert from refresher to bags, output classified as non-conformance until condition is met	SOP030
Chemical Testing	Presence of substances of concern that would render output unsuitable for intended use	GC-MS + HS GC-MS + XRF +OM	Batch does not achieve USD hold release. Not released for sale as primary product quality.	SOP001 + SOP004 + SOP055 + SOP002 + SOP003

2.6.1. Further information on complex control rules, where relevant

2.7. Relevant standard operating procedure for Operation

SOP code	Short description	Location)
LS-EHS-SSW-137	This process includes temperature and material checks while the load is still on the truck. Bales failing the temperature checks are mover to the quarantine area.	Yard
LS-EHS-SSW-295	BRT loading bales on the infeed	BRT area
LS-EHS-SSW-036	Erema Extrusion Process 1	Erema area
LS-EHS-SSW-040	Refresher start-up	Erema area
LS-EHS-SSW-041	Erema Bagging Pellet on Bagging Station	Erema area
LS-EHS-SSW-042	Sending material from Refresher to Silo	Erema area
LS-EHS-SSW-066	Erema purging procedure	Erema area
LS-EHS-SSW-069	Erema Extrusion Process 2	Erema area
LS-EHS-SSW-070	Erema Extrusion Process 3	Erema area

3. Section 3: Quality Assessment

3.1. List of quality assessment stages

QA 1: Unloading and stacking the bales

QA stage and number	Assessment name	Definition/Description	Criterion	Records	SOP Code (SOPNr – DocNr)
QC 1.1	Unloading and stacking the bales	This process includes temperature and material checks while the load is still on the truck. Bales failing the temperature checks are moved to the quarantine area.	< 50 °C or < 15 °C above ambient is a pass	Operational management SharePoint	LS-EHS-SSW-137

QA 2: Acceptance of waste from supplier.

QA stage and number	Assessment name	Definition/Description	Criterion	Records	SOP Code (SOPNr – DocNr)
QC 2.1	Sampling request log	Testing to confirm that PP bales delivered to site achieve our permitted minimum of white and natural PP.	>80% PP	Sampling request log document	SOP023

QA 3: Post sort former food use percentage measurement.

QA stage and number	Assessment name	Definition/Description	Criterion	Records	SOP Code (SOPNr – DocNr)
QC 3.1	Food grade sampling	Post sorting testing to confirm percentage to material is white and natural and former food use material	>95%	Food grade sampling document	SOP080

QA 4: Chemical testing of unwashed flake.

QA stage and number	Assessment name	Definition/Description	Criterion	Records	SOP Code (SOPNr – DocNr)
QC 4.1	Collecting of flake	Material is collected after first sorting, shredding and granulation but before any washing or decontamination.	Identify and label sample	Storage of sample	SOP024
QC 4.2	GC-MS/FID testing	Material is characterised by GC-MS, identified peaks are quantified by GC-FID	Determined by chemists	GCMS post run Analysis & LabSolutions.	SOP001
QC 4.3	HS GC-MS testing	Material is characterised and quantified by HS GC-MS.	Determined by chemists	GCMS post run Analysis	SOP055
QC 4.4	XRF testing	Material is screened for elements Na-U.	Determined by chemists	Spectro magic NX	SOP004

QA 5: Chemical testing of washed flake.

QA stage and number	Assessment name	Definition/Description	Criterion	Records	SOP Code (SOPNr – DocNr)
QC 5.1	Sampling from the bagging station	Material is collected after wash and before palletisation	Identify and label sample	Sample storage	SOP026
QC 5.2	Determination of COD in flake	Flake samples are extracted, and the solution is tested for COD (chemical oxygen demand)	Pass <100 mgkg ⁻¹	Value recorded in quality database	SOP013

QA 6: Testing of colour before refresher.

QA stage and number	Assessment name	Definition/Description	Criterion	Records	SOP Code (SOPNr – DocNr)
QC 6.1	Colour	Colour is tested by spectrophotometer	dE from standard <2.5	Value recorded in quality database	SOP030

QA 7: Product testing batch release.

QA stage and number	Assessment name	Definition/Description	Criterion	Records	SOP Code (SOPNr – DocNr)
QC 7.1	sampling	Obtaining PP5 pellet sample from refresher autosampler	Identify and label sample	Operational management sheet	SOP025
QC 7.2	XRF	Elemental screen and heavy metals (Pb, HG, Cd, Cr(VI))	<100ppm	Spectro magic NX	SOP004
QC 7.3	GC	SVOC (Semi-volatile organic compounds)	Pass/fail determined by chemists	GCMS post run Analysis & LabSolutions.	SOP001
QC 7.4	GC	VOC (Volatile organic compounds)	Pass/fail determined by chemists	GCMS post run Analysis	SOP055
QC 7.5	MFI	Measurement of Melt Flow Index (MFI) by Zwick A-flow	Pass 13-18 g.10mins ⁻¹	Value recorded in quality database	SOP021
QC 7.6	Impact	Notched Izod impact strength test	Pass >5 kJ.m ²	Value recorded in quality database	SOP022
QC 7.7	Density	Density measurement of polymer samples	Pass 090-092 g.cm ⁻³	Value recorded in quality database	SOP018
QC 7.8	Flexural Modulus	Determination of Flex Modulus	Pass 1300-1900 MPa	Value recorded in quality database	SOP020
QC 7.9	Tensile stress at yield	Tensile Strength Testing	Pass 25-35 MPa	Value recorded in quality database	SOP027
QC 7.10	Elongation at break	Tensile Strength Testing	Pass >20%	Value recorded in quality database	SOP027
QC 7.11	PP content	Differential Scanning Calorimetry (DSC) testing of polymer sample	Pass >99.0	Value recorded in quality database	SOP019
QC 7.12	Colour	Determination of colour by spectrophotometer.	pass dE <2.5	Value recorded in quality database	SOP030
QC 7.13	OM	Overall migration in 95% Ethanol	10mg/dm ²	Value recorded in quality database	SOP002

3.2. Relevant standard operating procedures applied at QA stages

The table below shall provide a reference to each standard operating procedure used at QA stages, provide a short description thereof, and indicate the location where it is carried out.

Quality Assessment (QA) No (ref 3.1)	SOP code (SOPNr – DocNr)	Short description	Location (of QA)
1.1	023	Testing to confirm that PP bales delivered to site achieve our permitted minimum of white and natural PP.	Feedstock testing cabin
2.1	080	Post sorting testing to confirm percentage to material is white and natural and former food use material	Feedstock testing cabin
3.1	024	Material is collected after first sorting, shredding and granulation but before any washing or decontamination.	Factory floor
3.2 & 6.3	001	Material is characterised by GC-MS, identified peaks are quantified by GC-FID	Analytical lab
3.3 & 6.4	055	Material is characterised and quantified by HS GC-MS.	Analytical lab
3.4 & 6.2	004	Using XRF material is screened for elements Na-U.	Analytical lab
4.1	026	Material is collected after wash and before palletisation	Factory floor
4.2	013	Flake samples are extracted, and the solution is tested for COD (chemical oxygen demand)	Wet chemistry lab
5.1 & 6.12	030	Colour is tested by spectrophotometer	Physical testing lab
6.1	025	Obtaining PP5 pellet sample from refresher autosampler	Factory floor
6.5	021	Measurement of Melt Flow Index (MFI) by Zwick A-flow	Physical testing lab
6.6	022	Notched Izod impact strength test	Physical testing lab
6.7	018	Density measurement of polymer samples	Wet chemistry lab
6.8	020	Determination of Flex Modulus	Physical testing lab
6.9 & 6.10	027	Tensile Strength Testing	Physical testing lab
6.11	019	Differential Scanning Calorimetry (DSC) testing of polymer sample	Wet chemistry lab

4. Section 4: Record repository

4.1 Quality assessment recording systems

Quality Assessment No (ref 3.1)	Name	Definition /Description	Location	Backup	SOP Code (SOPNr – DocNr)	Modification prevention
Stage 1	Sampling request log (Operational Management)	Data on weights of materials recorded with photo of each category	SharePoint	Backup server at datastore. G & Paper copy of data Archived	SOP023	System locks after signing by the technician and paper record for traceability.
Stage 2	Food grade sampling	Data on weights of materials recorded with photo of non-food items.	SharePoint	Paper copy of data	SOP080	System locks after signing by the technician and paper record for traceability.
Stage 3	Unwashed Flake	Data is stored in GCMS post run Analysis & LabSolutions.	GCMS Software	Backup server at datastore. G & OneDrive	SOP024	Data on instrument cannot be modified and SharePoint record for traceability.
Stage 4	COD on washed flake	Data is stored electronically and on paper copies	Zaptic	OneDrive	SOP013	Signed paper copies
Stage 5	Colour	Data is stored in Spectro magic NX	Spectrophotometer Software	Backup server at datastore. G & quality database SharePoint	SOP030	Data on instrument cannot be modified and SharePoint record for traceability.
Stage 6	Silo batch release	Data is stored in GCMS post run Analysis & LabSolutions.	GCMS Software	Backup server at datastore. G & OneDrive	SOP001 & SOP055	Data on instrument cannot be modified. turned into PDF and paper record.

4.2. List of standard operating procedures codes for recording system

Quality Assessment No (ref 3.1)	SOP code (SOPNr – DocNr)	Short description	Location (of entry into recording system)
1.1	SOP023	Process SOP includes how data must be stored.	Feedstock testing cabin.
2.1	SOP080	Process SOP includes how data must be stored.	Feedstock testing cabin.
4.2	SOP013	Process SOP includes how data must be stored.	Wet chemistry lab
3.2 & 6.3	SOP001+SOP004+SOP055	GC and XRF SOPs include how data must be stored.	Analytical lab
5.1 & 6.12	SOP030	Spectrophotometer SOP includes how data must be stored.	Physical testing lab
3.2 & 6.3	SOP001+SOP055	GC and XRF SOPs include how data must be stored.	Analytical lab
4.2	013	Flake samples are extracted, and the solution is tested for COD (chemical oxygen demand)	Wet chemistry lab
5.1 & 6.12	030	Colour is tested by spectrophotometer	Physical testing lab
6.1	025	Obtaining PP5 pellet sample from refresher autosampler	Factory floor
6.5	021	Measurement of Melt Flow Index (MFI) by Zwick A-flow	Physical testing lab
6.6	022	Notched Izod impact strength test	Physical testing lab
6.7	018	Density measurement of polymer samples	Wet chemistry lab
6.8	020	Determination of Flex Modulus	Physical testing lab
6.9 & 6.10	027	Tensile Strength Testing	Physical testing lab
6.11	019	Differential Scanning Calorimetry (DSC) testing of polymer sample	Wet chemistry lab

4.3. Other relevant records/systems

NONE