No. 1165 **14 December 2007**

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Pulp and Paper

registered by Organising Field 06 – Manufacturing, Engineering and Technology, publishes the following Qualification and Unit Standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification and Unit Standards. The full Qualification and Unit Standards can be accessed via the SAQA web-site at **www.saqa.org.za**. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification and Unit Standards should reach SAQA at the address below and ***no later than 28 January 2008.*** All correspondence should be marked **Standards Setting – Pulp and Paper** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:
National Certificate: Tissue Conversion

SAQA QUAL ID	*QUALIFICATION TITLE*		
59017	National Certificate: Tissue Conversion		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
QUALIFICATION TYPE	*FIELD*	*SUBFIELD*	
National Certificate	6 - Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	*MINIMUM CREDITS*	*NQF LEVEL*	*QUAL CLASS*
Undefined	120	Level 2	Regular-Unit Stds Based

PURPOSE AND RATIONALE OF THE QUALIFICATION
Purpose:

This qualification is used as an introduction to machine operations and maintaining production integrity in a tissue conversion operation. This competence provides the foundation needed to take responsibility for a significant process in the pulp and paper industry. It also provides the basis upon which further related learning and career development can take place.

Through the employment of competent operating personnel, employers have confidence that this critical work in the industry is efficiently carried out.

Social development and economic transformation are enhanced through efficient production, and career development and personal job satisfaction of operating personnel are facilitated through the learning process used to achieve the competency specified.

Qualifying learners will:

Have an understanding of the various process operations that are used in tissue conversion.

- Monitor, control and maintain machine operations in tissue converting.
- Control raw material loading in a tissue converting operation.
- Monitor and control product quality.
- Maintain quality, safety and productivity within the manufacturing environment.
- Have competence in mathematical literacy, science, reading, writing and speaking relevant to the pulp and paper industry.
- Be able to progress to higher qualifications in tissue conversion.

Rationale:

This qualification is the first in a learning pathway for learners working in the tissue conversion industry who need to progress beyond NQF Level 1 (ABET) and for learners who are entering the pulp and paper industry. The qualification reflects the workplace-based common or non-specific needs that a learner requires in the tissue conversion industry, before progressing to learning at a higher level. Learning at a higher level enables the learner to follow a career in any one of the diverse process operations within the pulp and paper industry, such as woodyard operations, chemical recovery, pulp manufacturing and paper, board or tissue manufacturing. The needs, as verified by various industry forums, are expressed by employers and employees,

for both now and the future. This qualification provides the learner with accessibility to employment and enables the learner to work in various machine operating jobs in the pulp and paper industry.

While the learning specified within this qualification is contextualised to the tissue conversion industry, the qualification has been constructed in such a way that the learner will be able, with some further learning, to adapt the skills and knowledge to other manufacturing industries. The qualification therefore supports the principle of portability within the manufacturing industry as a whole in South Africa and thus provides added value to the qualifying learner (increased employability) and to society and the economy (the creation of a pool of learners with manufacturing skills).

RECOGNIZE PREVIOUS LEARNING?
Y

LEARNING ASSUMED IN PLACE
It is assumed that learners are already competent in Literacy and Mathematical Literacy at ABET Level 4/NQF Level 1.

Recognition of Prior Learning:

This qualification may be achieved in part or completely through the recognition of prior learning, which includes formal, informal and non-formal learning and work experience. A learner wishing to be assessed towards this qualification may arrange to do so without attending any further training or education. The assessor and the learner will jointly decide on the most appropriate method to be taken.

Access to the qualification:

Access to the qualification is open. Access for learners with disabilities is dependant on the:

- Type and severity of the disability.
- Nature of the operational processes and requirements of the equipment.

QUALIFICATION RULES
In the compulsory Fundamental Component of the qualification, a learner must demonstrate his/her competence in the 20 credits in the field of Communication, 16 credits in the field of Mathematical Literacy, 18 in various Life Skills and 5 credits in Science.

The unit standards in the compulsory Core Component of the qualification reflect the skills and competencies needed for building expertise in the finishing and converting field. In the Core Component, the learner must demonstrate his/her competence in the total of 44 credits.

The Elective Component of the qualification enables the learner to pursue skills in a wide range of engineering areas, use of lifting equipment and basic computer skills together with at least one relevant packaging Unit Standard. The learner must demonstrate his/her competence in a minimum of 17 credits selected from the Elective component.

EXIT LEVEL OUTCOMES
Qualifying learners can:

1. Demonstrate an understanding of tissue conversion.

2. Monitor and control product parameters and quality in a manufacturing environment.

3. Keep the work area safe and productive.

4. Perform routine maintenance functions of tissue conversion equipment.

Critical Cross-Field Outcomes:

Each critical cross-field outcome was considered in terms of its applicability to each other of the specific outcomes for each unit standard. Where it was found to be applicable, the nature of the skills being developed was specified by the working group and captured in the standard.

Critical cross-field outcomes are assessed per unit standard and are part of all exit level outcomes.

Critical cross-field outcomes have been addressed by the exit level outcomes as follows:

While performing integrated conversion functions, qualifying learners can:

Identify and solve problems in which response displays that responsible decisions, using critical and creative thinking, have been made by:

- Identify relevant production information: Evident in Exit Level Outcome/s 1, 2, 3.
- Respond appropriately to plant information/take corrective action: Evident in Exit Level Outcome/s 1, 2, 3, 4.

Work effectively with others as a member of a team, group, organisation or community by:

- Working in a coordinated production team: Evident in Exit Level Outcome/s 1.
- Working in a team to maintain quality, safety, productivity and plant integrity: Evident in Exit Level Outcome/s 2, 3, 4.
- Coordinating one's work with that of others in the direct surrounding area, suppliers of raw materials and receivers of finished products: Evident in Exit Level Outcome/s 1, 2, 3, 4.

Organise and manage oneself and one's activities responsibly and effectively by:

- Planning and implementing one's own start-up and shutdown activities: Evident in Exit Level Outcome/s 1.
- Planning and implementing one's own routine operational functions: Evident in Exit Level Outcome/s 1, 2, 3, 4.
- Planning and implementing corrective action to maintain product quality: Evident in Exit Level Outcome/s 1, 2, 3, 4.

Collect, analyse, organise and critically evaluate information by:

- Monitoring operational parameters: Evident in Exit Level Outcome/s 1, 2, 4.
- Collating and sorting product quality data: Evident in Exit Level Outcome/s 1, 2, 4.
- Monitoring and interpreting product quality data and data obtained from product analysis: Evident in Exit Level Outcome/s 1, 2, 4.
- Managing records, reports and stock: Evident in Exit Level Outcome/s 1, 2, 3, 4.

Communicate effectively by using mathematical and/or language skills in the modes of oral and/or written presentations by:

- Recording and interpretation of instrument readings: Evident in Exit Level Outcome/s 1, 2, 3, 4.
- Preparing and presenting reports: Evident in Exit Level Outcome/s 1, 2, 3, 4.

Use science and technology effectively and critically, showing responsibility towards the environment and health of others by:

- Working according to health and safety regulations: Evident in Exit Level Outcome/s 1, 2, 3, 4.
- Controlling technologically advanced production equipment according to operating procedures: Evident in Exit Level Outcome/s 1, 2, 3, 4.
- Working and interpreting technologically advanced instrumentation and computer systems: Evident in Exit Level Outcome/s 1, 2, 3, 4.

Demonstrate an understanding of the world as a set of related systems by recognising that problem solving contexts do not exist in isolation by:

- Monitoring and controlling quality assurance practices: Evident in Exit Level Outcome/s 2, 4.
- Adjusting equipment and machinery while taking cognisance of the downstream impact: Evident in Exit Level Outcome/s 1, 2, 3, 4.

Contribute to the full personal development of each learner and the social and economic development of the society at large by:

- Maintaining and applying safety practices in the production environment: Evident in Exit Level Outcome/s 1, 2, 3, 4.
- Maintaining and applying quality practices in the production environment: Evident in Exit Level Outcome/s 1, 2, 3, 4.
- Performing core operating functions: Evident in Exit Level Outcome/s 1, 3, 4.
- Performing specialised computer functions: Evident in Exit Level Outcome/s 1, 2, 3, 4.

ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- Describing tissue converting operations.
- Describing pulp converting operations.
- Describing utility requirements of tissue conversion.
- Listing the properties and uses of raw materials.
- Selecting raw materials.
- Loading raw materials.
- Threading raw materials.
- Maintaining the flow of raw material supplies.

Associated Assessment Criteria for Exit Level Outcome 2:

- Define the terms Quality, Quality Assurance, Quality Control, Quality Management and consequences of not maintaining quality standards.
- Explain the processes used to ensure effective Quality Control.
- Understand the role and purpose of collecting information and monitoring product parameters in a manufacturing environment.
- Organise, summarise and plot product parameter information collected by measurements, checks and tests and the use of statistical process control methods.
- Assess product suitability by means of obtained data.
- Take corrective actions.

Associated Assessment Criteria for Exit Level Outcome 3:

- Explain the purpose of safety equipment and procedures.
- Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations.

- Use personal protective equipment.
- Perform housekeeping duties in work area.
- Identify and respond to unsafe or potentially unsafe conditions, incidents or acts that may occur.

Associated Assessment Criteria for Exit Level Outcome 4:

- Monitor the condition of equipment.
- Perform routine maintenance.
- Check completed work.
- Store tools and equipment.
- Report on equipment condition and maintenance activities.

Integrated Assessment:

The applied competence (practical, foundational and reflexive competencies) of this qualification will be achieved if a candidate is able to achieve all the exit level outcomes of this qualification.

The identification and solving of problems, team work, organising oneself, the using of applied science, the implication of actions and reactions in the world as a set of related systems must be assessed during any combination of practical, foundational and reflexive competencies assessment methods and tools to determine the whole person development and integration of applied knowledge and skills.

Applicable assessment tool(s) to establish the foundational, reflective and embedded knowledge to problem solving and application of the world as a set of related systems within the manufacturing and maintenance field.

A detailed portfolio of evidence is required to prove practical, applied and foundational competencies of the learner.

Assessors and moderators should develop and conduct their own integrated assessment by making use of a range of formative and summative assessment methods. Assessors should assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.

Unit standards in the qualification must be used to assess specific and critical cross-field outcomes. During integrated assessments the assessor should make use of formative and summative assessment methods and should assess combinations of practical, applied, foundational and reflective competencies.

INTERNATIONAL COMPARABILITY

An extensive international comparability comparison was made including Australia, New Zealand, Britain, Scotland, Canada, the USA, Sweden, Finland, Germany and relevant African countries.

The Australian and New Zealand qualifications registered on the NZQF and the AQF were seen as the best benchmarking partners. A comparison of the qualifications was undertaken and the best practice points were used in the generation of the South African qualification's unit standards, including similar core qualification structures and progressions from NQF Level 2 to NQF Level 4. As in the South African pulp and paper qualifications, separate qualifications are used to address pulp and paper production and tissue conversion. However, a Level 1 qualification consisting of safety, communication, mathematics, hand tools and quality unit standards is included in the Australian range.

The main points of comparison are:

The New Zealand "National Certificate in Pulp and Paper Manufacturing (Tissue Converting) (Level 2)" allows the learner to choose elective unit standards in domains that are comparable to what is required for the local qualification, e.g. safety, quality and mechanical skills. The New Zealand Unit Standards offer a number of packaging options and a choice of machine specific Units Standards, whereas in the proposed South African qualification offers similar packaging electives, but all the Finishing and Converting Unit Standards are compulsory.

The new Australian "Certificate II in Pulp and Paper Manufacture (Finishing and Converting)" contains certain elements that acted as reference points for this qualification, although the scope of the training is more general to a manufacturing environment, with a single Finishing and Converting Machine Sysytem Operation specialisation area. The elective component of this qualification has a high IT focus, with a limited mechanical skills element.

African countries with manufacturing facilities (including SADC countries) were searched for applicable qualifications or training programmes, but no relevant qualifications are offered in any of these countries. Similar to international companies, the majority of training is provided by equipment suppliers with three to five day short training courses. The only finishing facility in the SADC outside South Africa is in Swaziland learners from this facility will be trained according to the South African qualification.

Despite the fact that the pulp and paper industry is very well-developed in all the countries in the extreme northern areas of the world, most operators are still trained on the job with some short courses offered by equipment suppliers.

In the USA staff is mostly trained on the specific machines they operate at the time of establishing a new mill. TAPPI (a technical association for the pulp, paper and converting industry) offers a wide range of short, technical courses for operating staff. A number of pulp and paper related university degrees are also offered in the USA.

Canada has the largest pulp operations in the world, but because the national education system is not regulated, there are no formal national qualifications registered. As is the international trend, most operator training is done on the job. However, a privately offered "Pulp and Paper Operations Certificate" offers a seven month (post school) training course in general pulp and paper mill operations for entry level machine and utility operators. As in the USA, pulp and paper related degrees are offered by local universities.

The Scandinavian pulp and paper industry (including Sweden, Norway and Finland) follows the same trend. Most training is done on the job, with no vocational training leading to a qualification. As in the USA there are a variety of pulp and paper degrees on offer at universities in all three these countries.

Three year Paper Technology Diplomas are offered by several German Universities. Although these diplomas have a strong workplace emphasis, they are comparable to South African diplomas rather than vocational training qualifications. Subject content are similar to that contained in the technical part of the South African qualification, namely: industry background, machine operations and components, maintenance functions, computer skills with a technical project to complete the diploma.

There are no comparable qualifications registered by the British NVQ or the Scottish SVQ.

A comparison with similar international qualifications indicates that the focus of these qualifications is the same. Both local and international qualifications have a variety of business and soft skill electives supporting their core, with a wide scope of finishing and converting Unit Standards to complete the qualifications. The South African qualification includes options to

address the training needs of associated diaper and femcare product manufacturers within this qualification.

The Tissue Conversion Qualification compares well with the best international qualifications and training programmes offered. The compulsory technical content incorporated in the qualification will serve to support qualifying learners to make better informed, autonomous decisions within a more compact timeframe than international learners and will increase transportability of the qualification considerably.

ARTICULATION OPTIONS

This introductory NQF Level 2 qualification allows a vertical progression to the NQF Level 3 Tissue Conversion Qualification and will enable the qualifying learner to progress to a supervisory role through the FET Certificate: Tissue Conversion at NQF Level 4. This qualification is suitable preparation for a wide range of technically oriented supervisory careers.

The generic expertise obtained through this qualification will also enable qualifying learners to progress horizontally to obtain other pulp and paper qualifications on NQF Level 2 as well as a wide range of other manufacturing qualifications within, amongst others, the engineering, construction, chemical and pulp and paper industries.

Horizontal articulation within the processing and related industries can occur with the following registered NQF Level 2 qualifications:

- Continuous Processes: Chemical Operations.
- ID 24253: National Certificate: Batch Mixing.
- ID 21494: National Certificate: Dry Lumber Processing.
- ID 21490: National Certificate: Lumber Drying.
- ID 58515: National Certificate: Chemical Operations.
- New draft National Certificate: Pulp and Paper Operations.

Vertical articulation within the processing and related industries can occur with the following registered NQF Level 3 qualifications:

- National Certificate: Process Plant Operation.
- ID 58537: National Certificate: Chemical Operations.
- New draft National Certificate: Pulp and Paper Operations.

MODERATION OPTIONS

- An assessor, accredited with a relevant NQF Level 2 or higher qualification, will assess the learner's competency.

- Only an assessor with at least 3 years experience in finishing or conversion operations will assess the learner's competency.

- Anyone assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

- Be declared competent in all the outcomes of the National Assessor Unit Standards as stipulated by SAQA.
- Have a recognised technical qualification in pulp and paper such as the NTC in Pulp and Paper (N2) or an equivalent qualification.
- Have worked in the pulp and paper industry and be a subject matter expert in the area of pulp and paper making processes.

NOTES

UNIT STANDARDS

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	119463	Access and use information from texts	Level 2	5
Fundamental	9009	Apply basic knowledge of statistics and probability to influence the use of data and procedures in order to investigate life related problems	Level 2	3
Fundamental	13202	Apply study and learning techniques	Level 2	3
Fundamental	120402	Demonstrate an understanding of introductory principles of chemistry and physics	Level 2	5
Fundamental	7480	Demonstrate understanding of rational and irrational numbers and number systems	Level 2	3
Fundamental	12465	Develop a learning plan and a portfolio for assessment	Level 2	6
Fundamental	9008	Identify, describe, compare, classify, explore shape and motion in 2-and 3-dimensional shapes in different contexts	Level 2	3
Fundamental	119454	Maintain and adapt oral/signed communication	Level 2	5
Fundamental	9268	Manage basic personal finance	Level 2	6
Fundamental	12463	Understand and deal with HIV/AIDS	Level 2	3
Fundamental	119460	Use language and communication in occupational learning programmes	Level 2	5
Fundamental	7469	Use mathematics to investigate and monitor the financial aspects of personal and community life	Level 2	2
Fundamental	9007	Work with a range of patterns and functions and solve problems	Level 2	5
Fundamental	119456	Write/present for a defined context	Level 2	5
Core	244076	Apply elementary statistical process control principles	Level 2	6
Core	13217	Collect and use information	Level 2	5
Core	246606	Demonstrate an understanding of quality principles used in the manufacturing of pulp and paper hygiene products	Level 2	4
Core	246596	Demonstrate an understanding of tissue conversion	Level 2	5
Core	13220	Keep the work area safe and productive	Level 2	8
Core	246479	Monitor and control product parameters in a manufacturing environment	Level 2	5
Core	13221	Perform routine maintenance	Level 2	8
Core	246605	Select, load and maintain raw material supplies for tissue conversion	Level 2	3
Elective	9839	Apply and maintain safety in an electrical environment	Level 1	5
Elective	117867	Managing files in a Graphical User Interface (GUI) environment	Level 1	3
Elective	116932	Operate a personal computer system	Level 1	3
Elective	244365	Lift and move material and equipment by means of a forklift	Level 2	3
Elective	246600	Operate a bagging system	Level 2	4
Elective	246593	Operate a bundler system	Level 2	4
Elective	116235	Operate a pendant controlled overhead crane	Level 2	5
Elective	246604	Operate a wrapper system	Level 2	4
Elective	13214	Operate and monitor a drilling machine to produce simple components	Level 2	6
Elective	13205	Operate and monitor a lathe to produce simple components	Level 2	12
Elective	13204	Operate and monitor a milling machine to produce simple components	Level 2	12
Elective	119753	Perform basic welding/joining of metals	Level 2	8
Elective	12215	Read, interpret and produce basic engineering drawings	Level 2	6
Elective	246592	Run a baler machine for baling tissue products	Level 2	3
Elective	246591	Run a packaging machine to package pulp and paper products	Level 2	4
Elective	119744	Select, use and care for engineering hand tools	Level 2	8
Elective	12476	Select, use and care for engineering measuring equipment	Level 2	4
Elective	12219	Select, use and care for engineering power tools	Level 2	6
Elective	12481	Sling loads	Level 2	4
Elective	113877	Understand fundamentals of electricity	Level 2	8

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Run a packaging machine to package pulp and paper products

SAQA US ID	*UNIT STANDARD TITLE*		
246591	Run a packaging machine to package pulp and paper products		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 2	4

SPECIFIC OUTCOME 1
Understand the fundamentals of a packaging machine.

SPECIFIC OUTCOME 2
Run a packaging machine.

SPECIFIC OUTCOME 3
Monitor and control the performance of the packaging machine.

SPECIFIC OUTCOME 4
Maintain the integrity of the work environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Elective	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Run a baler machine for baling tissue products

SAQA US ID	*UNIT STANDARD TITLE*		
246592	Run a baler machine for baling tissue products		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 2	3

SPECIFIC OUTCOME 1
Understand the fundamentals of a baler machine.

SPECIFIC OUTCOME 2
Run a baler machine.

SPECIFIC OUTCOME 3
Process bales.

SPECIFIC OUTCOME 4
Maintain the integrity of the work environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Elective	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a bundler system

SAQA US ID	*UNIT STANDARD TITLE*		
246593	Operate a bundler system		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 2	4

SPECIFIC OUTCOME 1
Understand the fundamentals of the operation of a bundler system.

SPECIFIC OUTCOME 2
Operate a bundler system.

SPECIFIC OUTCOME 3
Monitor and control the performance of a bundling system.

SPECIFIC OUTCOME 4
Maintain the integrity of the work environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Elective	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate an understanding of tissue conversion

SAQA US ID	*UNIT STANDARD TITLE*		
246596	Demonstrate an understanding of tissue conversion		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 2	5

SPECIFIC OUTCOME 1
Explain tissue converting operations.

SPECIFIC OUTCOME 2
Explain pulp converting operations.

SPECIFIC OUTCOME 3
Explain the utility requirements of tissue conversion.

SPECIFIC OUTCOME 4
Explain the basic properties and uses of raw materials.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Core	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a bagging system

SAQA US ID	***UNIT STANDARD TITLE***		
246600	Operate a bagging system		
ORIGINATOR		***PROVIDER***	
SGB Pulp and Paper			
FIELD		***SUBFIELD***	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	***UNIT STANDARD TYPE***	***NQF LEVEL***	***CREDITS***
Undefined	Regular	Level 2	4

SPECIFIC OUTCOME 1
Understand the fundamentals of the operation of a bagging system.

SPECIFIC OUTCOME 2
Operate a bagging system.

SPECIFIC OUTCOME 3
Monitor and control the performance of a bagging system.

SPECIFIC OUTCOME 4
Maintain the integrity of the work environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Elective	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Operate a wrapper system

SAQA US ID	*UNIT STANDARD TITLE*		
246604	Operate a wrapper system		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 2	4

SPECIFIC OUTCOME 1
Understand the fundamentals of the operation of a wrapper system.

SPECIFIC OUTCOME 2
Operate a wrapper system.

SPECIFIC OUTCOME 3
Monitor and control the performance of a wrapper system.

SPECIFIC OUTCOME 4
Maintain the integrity of the work environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Elective	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Select, load and maintain raw material supplies for tissue conversion

SAQA US ID	*UNIT STANDARD TITLE*		
246605	Select, load and maintain raw material supplies for tissue conversion		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 2	3

SPECIFIC OUTCOME 1
Select raw materials for tissue conversion.

SPECIFIC OUTCOME 2
Load raw materials for tissue conversion.

SPECIFIC OUTCOME 3
Thread raw materials for tissue conversion.

SPECIFIC OUTCOME 4
Maintain raw material supplies to the tissue conversion machines.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Core	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate an understanding of quality principles used in the manufacturing of pulp and paper hygiene products

SAQA US ID	*UNIT STANDARD TITLE*		
246606	Demonstrate an understanding of quality principles used in the manufacturing of pulp and paper hygiene products		
ORIGINATOR		*PROVIDER*	
SGB Pulp and Paper			
FIELD		*SUBFIELD*	
6 - Manufacturing, Engineering and Technology		Manufacturing and Assembly	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 2	4

SPECIFIC OUTCOME 1
Define the terms Quality, Quality Assurance, Quality Control and Quality Management.

SPECIFIC OUTCOME 2
Explain the requirements and processes used to ensure effective Quality Control.

SPECIFIC OUTCOME 3
Describe the factors that affect product quality.

SPECIFIC OUTCOME 4
Demonstrate an understanding of the consequences of poor quality control.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL	STATUS	END DATE
Core	59017	National Certificate: Tissue Conversion	Level 2	Draft - Prep for P Comment	