

INSPECTION REPORT

BEA2023039

Date of report:	2023-04-03	page 1 of 5	
Client:	Crown forest d.o.o. (attn. Mr. Jovan Kostić)		
Address:	Prilike bb, 32252 Ivanjica, Serbia		
Subject:	Pellets production in Ivanjica, address: Prilike bb, 32252 Ivanjica, Serbia		
Content:	On-site surveillance inspection 2023		
Certification program:	ENplus® Handbook (Vers. 3.0, August 2015)		
Date of inspection:	2023-02-07	Date of sampling:	2023-02-08, 2023-03-03, 2023-03-22;
		Order date:	2023-01-12

1 EVALUATION

The pellet production of Crown forest d.o.o. in Ivanjica (SERBIA) is complying with all requirements of:

ENplus® quality A2



MINOR NON-CONFORMITIES FROM LAST INSPECTION:

External QM training missing.

MAJOR NON-CONFORMITIES:

- I. Quality of audit sample not complying with standards, because of overlenghts. Solved via complying resample.

MINOR NON-CONFORMITIES:






- II. External QM training missing.
- III. Testing not always done 1x/shift.

OBSERVATIONS:

Implementation of new ENplus® standards. Upcoming changes were discussed during the audit.

This inspection report comprises 5 pages und 0 appendix(es).

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			<p>EPC-listed Auditor in Charge  Dipl.-Ing. Niklas Illich</p>	
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2 SCOPE OF APPLICATION

The results contained in this inspection report shall serve as proof of compliance with ENplus® regulations. The client is responsible for the conformity of products with ENplus® regulations which will be assured when quality assurance measures according ENplus® regulations are continuously applied.

3 GENERAL DATA

Certification body:	HFA
Testing body:	BEA
Business activities:	Production Bagging of pellets (incl. trade)
Service provider:	no
Multisite company:	no

4 INSPECTION

The inspection audit was carried out by Mr. Niklas Illich attended by Mr. Marko Antović and Mr. Brane Pesić at the company site. Responsibilities in the company are assigned clearly. The responsibility in the company is divided as follows:

Management representative and QM:	Mr. Jovan Kostić (jkostic10@gmail.com)
Production manager (responsible for self-inspection):	Mr. Brane Pesić
Contact person:	Mr. Marko Antović (marko.crownforest@gmail.com)

4.1 PRODUCTS

Certified products:	wood pellets EN ISO 17225-2, class A2
Dimensions:	6mm
ENplus® ID-Number:	RS011
Bag designs (approved):	Crown forest
Bag designs (non-approved):	none
Bulk pellets:	no
Bagged pellets:	yes

4.2 MASS BALANCE

produced pellets quality A1 bulk:	0t
produced pellets quality A2 bulk:	0t
produced pellets quality A1 bagged pellets:	0t
produced pellets quality A2 bagged pellets:	19.028,2t
produced pellets non certified:	300,34t
sold pellets quality A1 bulk:	0t
sold pellets quality A2 bulk:	0t
sold pellets quality A1 bagged pellets:	0t
sold pellets quality A2 bagged pellets:	18.988,0t
sold pellets non certified:	300,34t
Storage quality A1 bulk:	0t
Storage quality A2 bulk:	0t
Storage quality A1 bagged pellets:	0t
Storage quality A2 bagged pellets:	40,2t
Storage non certified:	0t

4.3 RAW MATERIAL

Origin of wood:	60 % from external suppliers and 40 % from own production (attached sawmill)
Source:	~ 80 % stemwood (1.1.3 acc. EN ISO 17225-1) ~ 20 % chemically untreated wood residues (1.2.1 acc. EN ISO 17225-1)
Species:	Softwood 20% (spruce), hardwood 80% (beech).
Form:	Roundwood, chips, offcuts/slabs.
Operation areas:	Clean, protected from contamination.
Storage:	Outdoor storage on large, paved wood-yard for logs and roofed boxes for residues/chips.
Control and documentation:	All deliveries are checked visually and weighed. Further each truck is recorded with origin, truck and driver. Two persons control the logs in the forests to decide if company will purchase them or not (serves as prior quality control).
Suppliers:	There is only one supplier (Serbian state forest), for the sawmill and pellet production.
Additives:	None.
Sustainability of raw material:	Valid FSC certification: SGS-COC-009763 (pellets within the scope)

4.4 PRODUCTION PROCESS

Raw material preparation:	Logs are debarked and chipped (one fixed and one mobile chipper as well as two wet mills).
Drying:	Raw material is dried by a drum drier.
Separation of contaminants and impurities:	Oversized particles and impurities are removed by sieves, disc separators, stone traps and metal separators are used.
Pellet production:	Raw material is conditioned using water and is pelletized by 3 ring die presses (1 t/h each). Pellets are cooled in a counter current cooler.
Removal of fines:	Fines are removed by different sieves with suitable size and sieve aperture, dust is removed by air separators.
Non-complying pellets:	A possibility for separation of low-quality batches exists (manually). They are packed in big bags.
Product separation:	In place, certified product only in 15 kg bags. Low quality product in big bags.
Storage:	Pellets are stored in bags on pallets in attached warehouse (capacity ~2.000t).
Loading areas:	clean, protected from moisture
Testing pellet temperature:	n.a.
Bulk delivery final end customer:	n.a.
Delivery big bag:	Only few deliveries per year of non-certified pellets for local cement factory.
Delivery vehicles:	n.a.
Bagging station:	Bagging station is calibrated and bag weight checked regularly in lab.
Storage Bagged pellets:	UV-light protected

4.5 QUALITY CONTROL MEASURES

The factory production control is carried out in accordance with the requirements of the regulations. Tests are done regular and are documented properly. Instruments are maintained properly, calibration and/or performance tests are done.

Parameter production	Test frequency	Test equipment
Overlength	Once per shift	Caliper ruler
Moisture content	Once per shift	Humimeter
Mechanical durability	Once per shift	BEA tumbler 1000
Bulk density	Once per shift	5l stainless steel container

Parameter delivery	Test frequency loading station	Test frequency bagging line	Test equipment
Overlength	n.a.	Once per shift	Caliper ruler
Fines content	n.a.	Once per shift	3,15mm sieve (400mm Ø)

Comparison of analysis results

Parameter	Unit	BEA	Crown
Moisture	%	6,0	4,3
Bulk density	kg/m ³	630	625
Mechanical durability	%	97,8	97,98
Fines content	%	0,2	0,13

Results comply well within expected variation.

4.6 DELIVERY DOCUMENTATION

ENplus®-seal or ID-number:	yes
Quality class:	yes
Bag design approval number:	not yet available
Weight:	yes
Diameter:	no
Trading form:	yes
Date:	yes
truck license number:	n.a.

Diameter information will be added immediately, and bag design version number will be implemented as soon as put into practice.

5 QUALITY ASSURANCE

QM-system:	yes
QM-competence:	yes
Operating procedure production:	yes
Operating procedure storage:	yes
Operating procedure bagging:	yes
Operating procedure additive:	n.a.
Shift book:	yes

Records on failures, breakdowns and maintenance:	A shift book exists containing all relevant information.
Calibration and validation:	See comparison measurement. Scales show valid calibration.
External training:	External QM training is missing.
Internal training:	Trainings are done according to requirements. Testing is done together regularly.
Non-conforming products:	Sold to local cement factory. Documented via invoices.
Bagged pellets:	Production date: not yet implemented Site of bagging: not yet implemented
Reference samples:	n.a.
Customer complaints:	Customer complaints are documented. Documentation contains date, reason and action to achieve customer satisfaction. total amount: 0
Not accepted complaint:	n.a.
Bagging of foreign bag designs:	n.a.
ENplus® trademarks:	ENplus® wordmark used correctly.
Reporting requirements:	Relevant changes reported to ENplus® management: n.a.

6 SAMPLING

Samples were taken following the principles of ISO 21945.

One bag 15kg was taken from the packaging machine. Sampling took place one day after the audit, as there was miscommunication about the date of the audit. Production was not fully started when auditor was arriving on-site. Therefore, paperwork was done on 7th and sampling as well as internal testing on 8th of February. A second bag was taken from stock, because the issue of production not being started and not running stable. Both bags were signed by the auditor and taken by the auditor to the auditor's lab, where they arrived 13th of February. Resamples were taken from Marko Antović under remote instruction of the auditor 3rd and 22nd of March. They were both times sealed and sent to the auditor's lab by the company. They arrived 5th and 27th of March in Vienna.

7 TEST / PELLET LAB ANALYSIS RESULTS

The results of the lab analysis are compiled in test report BEA2023039b.

8 REMARKS

- I. Quality of audit sample not complying with standards. Some pellets longer than 45mm were detected in the sample. Issue was already realised during the audit and was discussed with the company. Knives at the press were adjusted afterwards. Also, the procedure of internal testing was changed, the determination/documentation of 5 longest pellets in each sample was added. Improvement of quality regarding length distribution was checked by the auditor remotely. Additionally, the company provided two resamples. No more pellets >45 mm were detected at the end, non-conformity therefore solved.
- II. External QM training missing. QM will attend external training offered by EPC in 2023.
- III. Testing not always done 1x/shift. Sometimes only 1x/day. Necessity was pointed out during the audit. Will be done more consequently and controlled next audit.