

**DEPARTMENT CIRCULAR**

No.07  
 Series of 2021

**SUBJECT: SUPPLEMENTAL GUIDELINES TO DEPARTMENT CIRCULAR (DC) NO. 15, SERIES OF 2020, RE: GUIDELINES FOR THE ESTABLISHMENT, ADOPTION, AND ENFORCEMENT OF THE NATIONAL LIST OF PHILIPPINE NATIONAL STANDARDS/ PHILIPPINE AGRICULTURAL AND BIOSYSTEMS ENGINEERING STANDARDS (PNS/PABES)**

In addition to the provisions set forth in DC No. 15, Series of 2020, this Circular establishing a national List of PNS/PABES is hereby issued.

**Section 1. Objectives**

The Circular aims to establish the National List of PNS/PABES relative to agricultural and fisheries mechanization. Specifically, the PNS/PABES indicated in the national list shall be used as technical reference for the following:

- Implementation of relevant technical regulations;
- Design, manufacture, fabrication, and assembly of agricultural and fisheries machinery;
- Design and construction of agricultural and fisheries infrastructures;
- Study of ABE and practice of ABE profession;
- Implementation of agricultural and fisheries mechanization and infrastructure projects;
- Procurement of agricultural and fisheries machinery and infrastructures;
- Signing and sealing of plans, designs, and specifications of agricultural and fisheries machinery, infrastructures, and other agri-fishery engineering projects ABEs;
- Testing and evaluation of agricultural and fisheries machinery by the University of the Philippines Los Banos- Agricultural Machinery Testing and Evaluation Center (UPLB-AMTEC), other accredited testing centers, and certified test engineers;
- Extension Support, Education, and Training Services (ESETS) for agricultural and fisheries machinery, infrastructures, and other agri-fishery engineering projects; and
- Other purposes analogous to the foregoing.

**Section 2. Scope**

This Circular shall cover PNS/PABES related to agricultural machinery and equipment and infrastructures. This include PNS/PABES developed by the UPLB-AMTEC and the DA-Bureau of Agriculture and Fisheries Standards (BAFS). The PNS/PABES indicated in the national list shall include the basic type of standards namely specifications, methods of tests, guides, and terminologies.

**Section 3. National List of PNS/PABES**

The PNS/PABES listed in Annex A of this Circular provides the list of standards for the adoption of DA bureaus, attached agencies and corporations, and Regional Field Offices (RFOs) as basis for the implementation of relevant technical regulations. It shall also be utilized by other relevant agencies and sectors based on the provisions of DC No. 15, Series of 2020.

Specifically, the DA-BAFE shall use the National List in the implementation of its relevant technical regulations. As part of its mandates under the AFMEch Law of 2013, the DA-BAFE shall conduct compliance monitoring activities to evaluate the compliance of agricultural and fisheries engineering projects of DA with relevant PNS/PABES.

**Section 4. Miscellaneous and Transitory Provisions**

**1. Standards with Concerns**

In case that DA-BAFE receives concerns on the standards indicated in the National List from relevant stakeholders, it should be supported by an official written communication with accompanying documents such as scientific review, technical report, or documented evidence. The DA-BAFE shall endorse these concerns to the Review Committee (RC), which shall deliberate and identify appropriate actions to be taken to address the concern. Prior to the identification of appropriate actions, the RC may conduct validation activities if necessary, to verify the stakeholder's concerns.

Further actions that can be undertaken by the RC includes any of the following:

- Retaining the PNS/PABES in the National List

PNS/PABES shall be retained in the list for a reason that the concern, upon deliberation of the RC, does not necessarily affect the majority of the provisions and other requirements of the standard. The RC shall issue a technical justification on why the PNS/PABES shall be retained and how such concern/complaint can be addressed.

A technical justification may also provide recommendation to DA-BAFE to issue a temporary suspension of specific provisions of the PNS/PABES with concern until sufficient scientific and technical information becomes available to support its retention, amendment, or revision.

- Exclusion of PNS/PABES in the National List

PNS/PABES shall be excluded due to outdated provisions or unattainable requirements. The RC shall issue a technical justification on why the PNS/PABES shall be excluded from the National List and recommend alternative references that may be used for purposes specified in Section 1 such as international standards and/or UPLB-AMTEC approved protocols. PNS/PABES identified for exclusion from the National List shall be listed as Annex B of this Circular.

All technical justifications shall be endorsed to DA-BAFE for concurrence and approval. The approved technical justification shall then be endorsed to concerned stakeholders while the PNS/PABES with concerns that require amendment or revision shall be endorsed to DA-Philippine Council for Agriculture and Fisheries (PCAF) - Committee on Agricultural and Fisheries Mechanization (CAFMEch) for subsequent endorsement to DA-BAFS. Detailed flow of procedures in addressing standards with concern is provided in Annex C of this Circular.

**2. Transitory Period for Newly Revised PNS/PABES**

The transitory period stipulated in Section 5.1 of DC No. 15, Series of 2020 shall be reduced to 90 days considering the urgency in the use of newly amended/revised standards, more specifically for procurement purposes and testing and evaluation. The transitory period does not apply to newly developed PNS/PABES.

The National List shall be amended/revised to include newly developed/amended/revised standards upon receipt of notification from DA-BAFS.

**3. Test Reports**

Pending revision of the excluded PNS/PABES and the inclusion of its revised version in the National List, any test reports issued that adopted the said excluded PNS/PABES as reference for purposes specified in Section 1 shall remain valid considering the provisions of DC No. 15, Series of 2020 and DC No. 05, Series of 2017 (National Guidelines on Testing and Evaluation of Agricultural and Fisheries Machinery).

**4. Certificate of Conformity (CC)**

CCs issued utilizing test reports that adopted excluded PNS/PABES shall conform to relevant issuances of DA-BAFE.

**Section 5. Separability Clause**

If, for any reason, any provision of this Circular or application of such provision is held invalid, the other provisions hereof as they are separable, shall remain in full force and effect.

**Section 6. Repealing Clause**

All prior issuances, rules, regulations, or part thereof which are inconsistent with this Circular are hereby repealed, revoked, amended, or modified accordingly.

**Section 7. Amendments**


Any amendment to the provision/s of this Circular shall conform to the mechanisms under the Department Circular No. 15 Series of 2020 and its amendments, if any. Further, the National List shall be amended to include newly developed/amended/revised standards upon receipt of notification from DA-BAFS.

**Section 8. Effectivity**

This Circular shall become effective 15 days following the completion of its publication in a newspaper/UP Law Center of general circulation and its filing with the National Administrative Register of the University of the Philippines Law Center.

Done this 9<sup>th</sup> day of December 2021.

Approved by:

  
**WILLIAM D. DAR, Ph.D.**  
 Secretary



**Annex A**  
**National List of PNS on Agricultural and Biosystems Engineering**

PRODUCTION MACHINERY			
NO.	PAES/PNS NO.	TITLE	TYPE
1	PAES 106:2000	Soil Tillage and Equipment -Terminology	TERMINOLOGY
2	PAES 107: 2000	Hitch for Walking-type Agricultural Tractor	SPECIFICATIONS
3	PAES 108: 2000	Hexagonal Axle and Hub for Walking-type Agricultural Tractor	SPECIFICATIONS
4	PAES 109:2000	Walking-type Agricultural Tractor - Part 1: Pull-type	SPECIFICATIONS
5	PAES 110:2001	Walking-type Agricultural Tractor Part 2: Rotary-Tilling Type	SPECIFICATIONS
6	PAES 111:2000	Walking-Type Agricultural Tractor	METHODS OF TEST
7	PAES 112:2000	Lever-Operated Knapsack Sprayer	SPECIFICATIONS
8	PAES 113:2000	Lever-Operated Knapsack Sprayer	METHODS OF TEST
9	PAES 114:2000	Centrifugal Pump	SPECIFICATIONS
10	PAES 115:2000	Centrifugal, Mixed Flow and Axial Flow Water Pumps	METHODS OF TEST
11	PAES 116:2001	Small Engine	SPECIFICATIONS
12	PAES 117:2000	Small Engine	METHODS OF TEST
13	PAES 120:2001	Disc Harrow	SPECIFICATIONS
14	PAES 121:2001	Disc Plow	SPECIFICATIONS
15	PAES 122:2001	Seeder and Planter	SPECIFICATIONS
16	PAES 123:2001	Seeder and Planter	METHODS OF TEST
17	PAES 124:2002	Walking-type Agricultural Tractor Part 3: Special Type (Float-Assist Tiller)	SPECIFICATIONS
18	PAES 125:2002	Sprinkler Head Part I: Rotating Impact-Driven Type	SPECIFICATIONS
19	PAES 126:2002	Rotating Sprinkler Head	METHODS OF TEST
20	PAES 127:2002	Drilling Rig	SPECIFICATIONS
21	PAES 128:2002	Drilling Rig	METHODS OF TEST
22	PAES 129:2002	Electric Motors	SPECIFICATIONS
23	PAES 130:2002	Electric Motors	METHODS OF TEST
24	PAES 131:2004	Moldboard Plow	SPECIFICATIONS
25	PAES 132:2004	Disc/Moldboard	METHODS OF TEST
26	PAES 133:2004	Disc Harrow	METHODS OF TEST
27	PAES 134:2004	Furrower	SPECIFICATIONS
28	PAES 135:2004	Furrower	METHODS OF TEST
29	PAES 136:2004	Agricultural Trailer	SPECIFICATIONS
30	PAES 137:2004	Agricultural Trailer	METHODS OF TEST
31	PAES 139:2004	Roll-Over Protective Structures (ROPS)	SPECIFICATIONS
32	PAES 140:2004	Roll-Over Protective Structures (ROPS)	METHODS OF TEST
33	PAES 141:2005	Weeder	SPECIFICATIONS
34	PAES 142:2005	Weeder	METHODS OF TEST
35	PAES 143:2005	Rice Drum Seeder	SPECIFICATIONS
36	PAES 144:2005	Rice Drum Seeder	METHODS OF TEST
37	PAES 145:2005	Granular Fertilizer Applicator	SPECIFICATIONS
38	PAES 146:2005	Granular Fertilizer Applicator	METHODS OF TEST
39	PAES 147:2010	Field Cultivator	SPECIFICATIONS
40	PAES 148:2010	Field Cultivator	METHODS OF TEST
41	PAES 149:2010	Subsoiler	SPECIFICATIONS
42	PAES 150:2010	Subsoiler	METHODS OF TEST
43	PNS/PAES 151:2015	Mechanical Rice Transplanter	SPECIFICATIONS
44	PNS/PAES 152:2015	Mechanical Rice Transplanter	METHODS OF TEST
45	PAES 153:2010	Hand Pump	SPECIFICATIONS
46	PAES 154:2010	Hand Pump	METHODS OF TEST
47	PAES 155:2010	Mist Blower	SPECIFICATIONS
48	PAES 156:2010	Mist Blower	METHODS OF TEST
49	PAES 157:2011	Power Sprayer for Mango	SPECIFICATIONS
50	PAES 158:2011	Power Sprayer for Mango	METHODS OF TEST
51	PAES 159:2011	Sugarcane Planter	SPECIFICATIONS
52	PAES 160:2011	Sugarcane Planter	METHODS OF TEST
53	PAES 161:2011	Soil Auger	SPECIFICATIONS
54	PAES 162:2011	Soil Auger	METHODS OF TEST
55	PAES 163:2011	Spring -tooth Harrow	SPECIFICATIONS
56	PAES 164:2011	Spring -tooth Harrow	METHODS OF TEST
57	PAES 165:2011	Granule Applicator	SPECIFICATIONS
58	PAES 166:2011	Granule Applicator	METHODS OF TEST
59	PNS/PAES 167:2015	Disk Plow for Walking Type Agricultural Tractor	SPECIFICATIONS
60	PNS/PAES 168:2015	Disk Plow for Walking Type Agricultural Tractor	METHODS OF TEST
61	PNS/PAES 169:2015	Spike Tooth Harrow for Walking Type Agricultural Tractor	SPECIFICATIONS
62	PNS/PAES 170:2015	Spike Tooth Harrow for Walking Type Agricultural Tractor	METHODS OF TEST
63	PNS/PAES 171:2015	Rice Precision Seeder	SPECIFICATIONS
64	PNS/PAES 172:2015	Rice Precision Seeder	METHODS OF TEST
65	PNS/BAFS 287:2019	Aquaculture Feeder	SPECIFICATIONS
66	PNS/BAFS 288:2019	Aquaculture Feeder	METHODS OF TEST
67	PNS/BAFS PABES 301:2020	Four-Wheel Tractors	SPECIFICATIONS
68	PNS/BAFS PABES 302:2020	Four-Wheel Tractors	METHODS OF TEST

POSTHARVEST MACHINERY			
NO.	PAES/PNS NO.	TITLE	TYPE
1	PNS/PAES 201:2015	Heated-Air Mechanical Grain Dryer	SPECIFICATIONS
2	PNS/PAES 202:2015	Heated-Air Mechanical Grain Dryer	METHODS OF TEST
3	PAES 203:2000	Moisture Content Determination for Rice and Corn	GUIDE
4	PNS/PAES 204:2015	Mechanical Rice Thresher	SPECIFICATIONS
5	PNS/PAES 205:2015	Mechanical Rice Thresher	METHODS OF TEST
6	PAES 208:2000	Power-Operated Corn Sheller	SPECIFICATIONS
7	PAES 209:2000	Power-Operated Corn Sheller	METHODS OF TEST
8	PNS/PAES 212:2015	Rice Reaper	SPECIFICATIONS
9	PNS/PAES 213:2015	Rice Reaper	METHODS OF TEST
10	PAES 214:2004	Rubber Roll for Rice Mill	SPECIFICATIONS
11	PAES 215:2004	Rubber Roll for rice Mill	METHODS OF TEST
12	PAES 216:2004	Hammer Mill	SPECIFICATIONS
13	PAES 217:2004	Hammer Mill	METHODS OF TEST
14	PAES 218:2004	Forage Chopper	SPECIFICATIONS
15	PAES 219:2004	Forage Chopper	METHODS OF TEST
16	PAES 220:2004	Peanut sheller	SPECIFICATIONS
17	PAES 221:2004	Peanut sheller	METHODS OF TEST
18	PAES 222:2005	Chipping Machine	SPECIFICATIONS
19	PAES 223:2005	Chipping Machine	METHODS OF TEST
20	PNS/PAES 224:2015	Rice Combine Harvester	SPECIFICATIONS
21	PNS/PAES 225:2015	Rice Combine Harvester	METHODS OF TEST
22	PAES 226:2005	Micromill	SPECIFICATIONS
23	PAES 227:2005	Micromill	METHODS OF TEST
24	PAES 228:2005	Fiber Decorticator	SPECIFICATIONS
25	PAES 229:2005	Fiber Decorticator	METHODS OF TEST
26	PAES 230:2005	Coconut Oil Expeller	SPECIFICATIONS
27	PAES 231:2005	Coconut Oil Expeller	METHODS OF TEST
28	PAES 232:2008	Multicrop Washer-Peeler	SPECIFICATIONS
29	PAES 233:2008	Multicrop Washer-Peeler	METHODS OF TEST
30	PAES 234:2008	Multicrop Juice Extractor	SPECIFICATIONS
31	PAES 235:2008	Multicrop Juice Extractor	METHODS OF TEST
32	PAES 236:2008	Crystallizer	SPECIFICATIONS
33	PAES 237:2008	Crystallizer	METHODS OF TEST
34	PNS/PAES 240:2010	Fans and Blowers	SPECIFICATIONS
35	PNS/PAES 241:2010	Fans and Blowers	METHODS OF TEST
36	PNS/PAES 242:2010	Biomass furnace	SPECIFICATIONS
37	PNS/PAES 243:2010	Biomass Furnace	METHODS OF TEST
38	PNS/PAES 244:2010	Biomass Shredder	SPECIFICATIONS
39	PNS/PAES 245:2010	Biomass Shredder	METHODS OF TEST
40	PNS/PAES 246:2010	Dehusked Corn Dryer	SPECIFICATIONS
41	PNS/PAES 247:2010	Dehusked Corn Dryer	METHODS OF TEST
42	PNS/PAES 248:2010	Fruit Dryer	SPECIFICATIONS
43	PNS/PAES 249:2010	Fruit Dryer	METHODS OF TEST
44	PNS/PAES 250:2011	Coconut Coir Decorticator	SPECIFICATIONS
45	PNS/PAES 251:2011	Coconut Coir Decorticator	METHODS OF TEST
46	PNS/PAES 252:2011	Coffee Pulper	SPECIFICATIONS
47	PNS/PAES 253:2011	Coffee Pulper	METHODS OF TEST
48	PNS/PAES 254:2011	Abaca Stripper	SPECIFICATIONS
49	PNS/PAES 255:2011	Abaca Stripper	METHODS OF TEST
50	PNS/PAES 256:2011	Corn Picker	SPECIFICATIONS
51	PNS/PAES 257:2011	Corn Picker	METHODS OF TEST
52	PNS/PAES 258:2011	Feed Mixer	SPECIFICATIONS
53	PNS/PAES 259:2011	Feed Mixer	METHODS OF TEST
54	PNS/PAES 260:2015	Paddy Seed Cleaner	SPECIFICATIONS
55	PNS/PAES 261:2015	Paddy Seed Cleaner	METHODS OF TEST
56	PNS/PAES 262:2015	Multipurpose Thresher	SPECIFICATIONS
57	PNS/PAES 263:2015	Multipurpose Thresher	METHODS OF TEST
58	PNS/PAES 264:2015	Rice Husk Fed Heating System	SPECIFICATIONS
59	PNS/PAES 265:2015	Rice Husk Fed Heating System	METHODS OF TEST
60	PNS/BAFS/PAES 188:2018	Coffee Grinder	SPECIFICATIONS
61	PNS/BAFS/PAES 189:2018	Coffee Grinder	METHODS OF TEST
62	PNS/BAFS/PAES 190:2018	Cacao Grinder	SPECIFICATIONS
63	PNS/BAFS/PAES 191:2018	Cacao Grinder	METHODS OF TEST
64	PNS/BAFS/PAES 212:2017	Coffee Huller	SPECIFICATIONS
65	PNS/BAFS/PAES 213:2017	Coffee Huller	METHODS OF TEST
66	PNS/BAFS/PAES 214:2017	Coffee Roaster	SPECIFICATIONS
67	PNS/BAFS/PAES 215:2017	Coffee Roaster	METHODS OF TEST
68	PNS/BAFS/PAES 241:2018	Corn Combine Harvester	SPECIFICATIONS
69	PNS/BAFS/PAES 242:2018	Corn Combine Harvester	METHODS OF TEST
70	PNS/BAFS/PAES 243:2018	Cassava Digger	SPECIFICATIONS
71	PNS/BAFS/PAES 244:2018	Cassava Digger	METHODS OF TEST
72	PNS/BAFS/PAES 245:2018	Cassava Granulator	SPECIFICATIONS
73	PNS/BAFS/PAES 246:2018	Cassava Granulator	METHODS OF TEST
74	PNS/BAFS/PAES 247:2018	Multicrop Pulverizer	SPECIFICATIONS
75	PNS/BAFS/PAES 248:2018	Multicrop Pulverizer	METHODS OF TEST
76	PNS/BAFS/PAES 249:2018	Multicrop Grater	SPECIFICATIONS
77	PNS/BAFS/PAES 250:2018	Multicrop Grater	METHODS OF TEST
78	PNS/BAFS/PAES 253:2018	Cacao Huller	SPECIFICATIONS
79	PNS/BAFS/PAES 254:2018	Cacao Huller	METHODS OF TEST
80	PNS/BAFS/PAES 255:2018	Cacao Roaster	SPECIFICATIONS
81	PNS/BAFS/PAES 256:2018	Cacao Roaster	METHODS OF TEST
82	PNS/BAFS/PAES 257:2018	Cassava Mechanical Dryer	SPECIFICATIONS
83	PNS/BAFS/PAES 258:2018	Cassava Mechanical Dryer	METHODS OF TEST
84	PNS/BAFS PABES 268: 2019	Mungbean Sheller	SPECIFICATIONS
85	PNS/BAFS PABES 269: 2019	Mungbean Sheller	METHODS OF TEST
86	PNS/BAFS PABES 272:2019	Peanut Grinder	SPECIFICATIONS
87	PNS/BAFS PABES 273:2019	Peanut Grinder	METHODS OF TEST
88	PNS/BAFS PABES 274:2019	Feed Pellet Mill	SPECIFICATIONS
89	PNS/BAFS PABES 275:2019	Feed Pellet Mill	METHODS OF TEST
90	PNS/BAFS PABES 276:2019	Hot Water Treatment Tank	SPECIFICATIONS
91	PNS/BAFS PABES 277:2019	Hot Water Treatment Tank	METHODS OF TEST
92	PNS/BAFS 283:2019	Brown Rice Stabilizer	SPECIFICATIONS

93	PNS/BAFS 284:2019	Brown Rice Stabilizer	METHODS OF TEST
94	PNS/BAFS PABES 303:2020	Rice Mill	SPECIFICATIONS
95	PNS/BAFS PABES 304:2020	Rice Mill	METHODS OF TEST
96	PNS/BAFS 251:2021	Corn Mill	SPECIFICATIONS
97	PNS/BAFS 252:2021	Corn Mill	METHODS OF TEST
98	PNS/BAFS 315:2021	Mechanical Peanut Thresher	SPECIFICATIONS
99	PNS/BAFS 316:2021	Mechanical Peanut Thresher	METHODS OF TEST

ENGINEERING MATERIALS			
NO.	PAES/PNS NO.	TITLE	TYPE
1	PAES 301:2000	V-belts and Pulleys for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
2	PAES 302:2000	Flat Belts and Pulleys for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
3	PAES 303:2000	Roller Chains and Sprockets for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
4	PAES 304:2000	Keys and Keyways for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
5	PAES 305:2000	Shafts for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
6	PAES 306:2000	Spur Gears for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
7	PAES 307:2001	Helical Gears for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
8	PAES 308:2001	Straight Bevel Gears for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
9	PAES 309:2001	Anti-friction Bearings for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
10	PAES 310:2001	Journal Bearings for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
11	PAES 311:2001	Bolts and Nuts for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
12	PAES 312:2001	Rivets for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
13	PAES 313:2001	Screws for Agricultural Machines	SPECIFICATIONS AND APPLICATIONS
14	PAES 314:2002	Washers	SPECIFICATIONS AND APPLICATIONS
15	PAES 315:2002	Pins	SPECIFICATIONS AND APPLICATIONS
16	PAES 316:2002	Metal Bars, Pipes, and Tubes	SPECIFICATIONS