

11 December 2025 372-25

Call for submissions - Application A1304

Endo-1,4-beta-xylanase from *Bacillus licheniformis* (gene donor: *Chryseobacterium cucumeris*) for use as a processing aid

Food Standards Australia New Zealand (FSANZ) has assessed an application made by Novonesis to amend the Australia New Zealand Food Standards Code to permit the use of the enzyme endo-1,4-beta-xylanase (EC 3.2.1.8) as a processing aid in the production of potable alcohol and starch and gluten fractions, and has prepared a draft food regulatory measure. Pursuant to section 31 of the *Food Standards Australia New Zealand Act 1991* (FSANZ Act), FSANZ now calls for submissions to assist consideration of the draft food regulatory measure.

Submissions on this application need to be made through the Consultation Hub.

All submissions on applications and proposals will be published on the Consultation Hub. We will not publish material that we accept as confidential. In-confidence submissions may be subject to release under the provisions of the *Freedom of Information Act 1982*. Submissions will be published following consultation and before the next stage in the statutory assessment process.

Under section 114 of the FSANZ Act, some information provided to FSANZ cannot be disclosed. More information about the disclosure of confidential commercial information is available on the FSANZ website at Making a submission.

For information on how FSANZ manages personal information when you make a submission, see FSANZ's Privacy Policy.

FSANZ also accepts submissions in hard copy to our Australia and/or New Zealand offices. There is no need to send an email or hard copy of your submission if you have submitted it through the FSANZ Consultation Hub.

DEADLINE FOR SUBMISSIONS: 11:59pm (Canberra time) 29 January 2026

Submissions received after this date will not be considered unless an extension had been given before the closing date. Extensions will only be granted due to extraordinary circumstances during the submission period. Any agreed extension will be notified on the FSANZ website and will apply to all submitters.

For information about making a submission, visit the FSANZ website at <u>current calls for public</u> comment and how to make a submission.

Questions about making a submission or application and proposal processes can be sent to standards.management@foodstandards.gov.au.

Submissions in hard copy may be sent to the following addresses:

Food Standards Australia New Zealand PO Box 5423 KINGSTON ACT 2604 AUSTRALIA Tel +61 2 6228 8226 Food Standards Australia New Zealand PO Box 10559 WELLINGTON 6140 NEW ZEALAND Tel +64 4 978 5630

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Supporting document

The following document which informed the assessment of this application is available on the A1304 page on the FSANZ website¹:

A1304 Supporting document - Risk and technical assessment

¹ www.foodstandards.gov.au/food-standards-code/applications/a1304-endo-14-beta-xylanase-bacillus-licheniformis-gene-donor

Executive summary

Novonesis has applied to Food Standards Australia New Zealand (FSANZ) to amend the Australia New Zealand Food Standards Code (the Code) to permit the use of the enzyme endo-1,4-beta-xylanase (E.C. 3.2.1.8) from *Bacillus licheniformis* containing the endo-1,4-beta-xylanase gene from *Chryseobacterium cucumeris* as a processing aid in the production of distilled alcohol² and production of starch and gluten fractions.

The proposed use of endo-1,4-beta-xylanase is technologically justified in the quantity and form stated by the applicant to hydrolyse xylosidic linkages in xylans present in grains for production of potable alcohol and starch and gluten fractions. The enzyme does not perform a technological function in the food for sale, therefore functioning as a processing aid for purposes of the Code. There are relevant identity and purity specifications for the enzyme in the Code with which the enzyme would have to comply when added to food in accordance with the Code or sold for use in food.

FSANZ concludes there are no public health or safety concerns with the use of endo-1,4-beta-xylanase produced from the *B. licheniformis* strain under the proposed conditions of use.

Following assessment, for the reasons set out in this report, FSANZ has prepared a draft variation to amend subsection S18—9(3) of the Code by listing the enzyme and its associated technological purposes in the table to subsection S18—9(3). This table lists substances (including enzymes) permitted for use as processing aids for specific technological purposes.

The effect of the draft variation, if approved, would be to permit the use of the enzyme as a processing aid in the production of potable alcohol and starch and gluten fractions, in accordance with the Code. The permission would be subject to the condition that the maximum level or amount of the enzyme in the food must be consistent with Good Manufacturing Practice.

FSANZ now seeks submissions on the draft variation to the Code.

² The term 'potable alcohol' is used in this report. See section 1.2 for further information.

1 Introduction

1.1 The Applicant

The applicant is Novonesis. When the application was submitted to Food Standards Australia New Zealand (FSANZ) the applicant was Novozymes Australia Ptd Ltd. This change was the result of a merger between Novozymes and Chr. Hansen. Novonesis will be referred to in the remainder of this document as the applicant.

1.2 The application

The purpose of the application is to amend the Australia New Zealand Food Standards Code (the Code) to permit the use of the enzyme endo-1,4-beta-xylanase (EC 3.2.1.8) from *Bacillus licheniformis* containing the endo-1,4-beta-xylanase gene (xylanase gene) from *Chryseobacterium cucumeris* as a processing aid in the production of distilled alcohol and starch and gluten fractions. Although the application refers to 'distilled alcohol', the term 'potable alcohol' has been used in this report. The permissions already in S18—9(3) for similar enzymes refer to 'potable alcohol' rather than distilled alcohol, which reflects that the terms are used interchangeably in the beverage industry. The applicant confirmed that 'potable alcohol' is appropriate in this case.

The enzyme will be referred to in this report as endo-1,4-beta-xylanase.

The applicant has indicated that the enzyme would be used in accordance with the principles of Good Manufacturing Practice (GMP)³.

1.3 The current standard

Australian and New Zealand food laws require food for sale to comply with relevant requirements in the Code. The requirements relevant to this application are summarised below.

1.3.1 Permitted use

Paragraph 1.1.1—10(6)(c) provides that food for sale cannot contain, as an ingredient or component, a substance used as a processing aid unless the use of that substance as a processing aid is expressly permitted by the Code. Section 1.1.2—13 provides that a substance 'used as a processing aid' in relation to a food is a substance used during processing that meets all of the following conditions:

- it is used to perform a technological purpose during the course of processing
- it does not perform a technological purpose in the food for sale, and
- it is a substance listed in Schedule 18 or identified in section S16—2 as an additive permitted at GMP.

³ GMP is defined in the Standard 1.1.2—2 of the Code as follows: *GMP* or *Good Manufacturing Practice*, with respect to the addition of substances used as food additives and substances used as processing aids to food, means the practice of:

⁽a) limiting the amount of substance that is added to food to the lowest possible level necessary to accomplish its desired effect; and

 ⁽b) to the extent reasonably possible, reducing the amount of the substance or its derivatives that:
 (i) remains as a *component of the food as a result of its use in the manufacture, processing or packaging; and

⁽ii) is not intended to accomplish any physical or other technical effect in the food itself (c) preparing and handling the substance in the same way as a food ingredient.

Standard 1.3.3 and Schedule 18 list the permitted processing aids. Enzymes of microbial origin permitted to be used as processing aids are listed in the table to subsection S18—4(5) or table to subsection S18—9(3) of Schedule 18, depending on whether a technological purpose has been specified. An enzyme of microbial origin listed in the table to subsection S18—4(5) is permitted for use as a processing aid to perform any technological purpose if the enzyme is derived from the corresponding source specified in the table. The table to subsection S18—9(3) lists those substances, including enzymes derived from particular sources, that are permitted to be used as processing aids for specific technological purposes in relation to:

- if a food is specified—that food, or
- if no food is specified—any food.

Additionally, paragraph 1.3.3—11(c) specifies that the substance may only be used as a processing aid if it is not present in the food at greater than the maximum permitted level for that substance indicated in the table to section S18—9.

Endo-1,4-beta-xylanase from *B. licheniformis* containing the endo-1,4-beta-xylanase gene from *C. cucumeris* is not listed in the table to subsection S18—9(3) and therefore is not currently a permitted processing aid for use in food processing.

1.3.2 Identity and purity requirements

Paragraph 1.1.1—15(1)(b) requires substances used as processing aids in food to comply with any relevant identity and purity specifications listed in Schedule 3 when added to food in accordance with the Code or sold for use in food.

Subsection S3—2(1) incorporates by reference the specifications listed in the Joint FAO/WHO Expert Committee on Food Additives (JECFA) Combined Compendium of Food Additive Specifications (FAO JECFA Monographs 26 (2021)), and the United States Pharmacopeial Convention (2022) Food Chemicals Codex (13th edition). These include general specifications for enzyme preparations used in food processing for identity and purity parameters.

1.3.3 Labelling requirements

Subsection 1.1.1—10(8) provides that food for sale must comply with all relevant labelling requirements in the Code.

Paragraphs 1.2.4—3(2)(d) and (e) exempt processing aids from the requirement to be declared in the statement of ingredients, unless other requirements apply.

1.4 International standards

1.4.1 International

In developing food regulatory measures, FSANZ must have regard to the promotion of consistency between domestic and international food standards. In terms of food safety, the relevant international standard setting body is the Codex Alimentarius Commission (Codex). In contrast to food additives, there is no Codex 'general standard' for processing aids. However, as noted in section 1.3.2 of this report, there are internationally recognised specifications for enzyme preparations established by JECFA and Food Chemicals Codex.

Additionally, there is a Codex guideline, Guidelines on Substances used as Processing Aids (CAC/GL 75-2010), which sets out general principles for the safe use of substances used as processing aids, including that substances used as processing aids shall be used under conditions of GMP.

1.4.2 Country specific

Endo-1,4-beta-xylanase from *B. licheniformis* has been evaluated as safe under the intended conditions of use by the European Food Safety Authority (EFSA) and has been approved for use in Denmark, Mexico, Brazil and France. The United States Food and Drug Administration (US FDA) provided a 'no questions' response to Novozyme's GRAS notification (GRN No. 728).

1.4 Reasons for accepting the application

The application was accepted for assessment because:

- it complied with the procedural requirements under subsection 22(2) of the Food Standards Australia New Zealand Act 1991 (FSANZ Act); and
- it related to a matter that warranted the variation of a food regulatory measure.

1.5 Procedure for assessment

The application is being assessed under the general procedure in accordance with the FSANZ Act.

2 Summary of the assessment

FSANZ has undertaken an assessment to determine whether the enzyme achieves its technological purpose in the quantity and form proposed, and to evaluate public health and safety risks that may arise from the use of this enzyme (see the Supporting Document (SD)). Summaries of both assessments are provided below.

2.1 Food technology

FSANZ concludes that endo-1,4-beta-xylanase functions as a processing aid in the production of potable alcohol and in the production of starch and gluten fractions, by catalysing the hydrolysis of endo-1,4-beta-xylosidic linkages in xylan. The applicant states the benefits of using the enzyme in these applications include increased fermentable sugars, and in the production of gluten and starch fractions, and increased yields. FSANZ concludes that the evidence presented provides adequate assurance that the enzyme, in the quantity and form proposed to be used (which must be consistent with GMP), is technologically justified and has been demonstrated to be effective in achieving its stated purpose.

Endo-1,4-beta-xylanase performs its technological purpose during the production of potable alcohol and production of starch and gluten fractions. It is inactivated by temperature during production and is not performing a technological purpose in the food for sale. It is therefore functioning as a processing aid for the purposes of the Code.

2.2 Risk assessment

FSANZ did not identify any public health and safety concerns associated with the use of endo-1,4-beta-xylanase from *B. licheniformis* containing the xylanase gene from *C. cucumeris* under the proposed use conditions. The production organism is neither pathogenic nor toxigenic. Analysis of the production strain confirmed the presence and stability of the inserted DNA.

Xylanases have a long history of safe human use for food production. This specific endo-1,4-beta-xylanase has been used for more than two years in France and in countries in which approval for enzyme processing aids is not required. Endo-1,4-beta-xylanase was not genotoxic *in vitro* or *in vivo*, and no homology was found with any known toxins or food allergens. The No Observed Adverse Effect Level (NOAEL) in a 13-week oral toxicity study in rats was 962 mg total organic solids (TOS)/kg bw/day.

The theoretical maximum daily intake (TMDI) of the TOS from the enzyme preparation was calculated to be 0.47 mg TOS/kg bw/day. A comparison of the NOAEL and the TMDI results in a large margin of exposure (MOE) of approximately 2,000.

Based on the reviewed data it is concluded that an acceptable daily intake (ADI) 'not specified' is appropriate.

2.3 Risk management

The risk management options available to FSANZ after assessment were to either:

- reject the application, or
- prepare a draft variation to the Code.

For the reasons listed in this report, FSANZ decided to prepare a draft variation to the Code permitting the proposed use of endo-1,4-beta-xylanase from *B. licheniformis* containing the endo-1,4-beta-xylanase gene from *C. cucumeris* in the production of potable alcohol and starch and gluten fractions. If approved, this permission would be subject to the condition that the maximum permitted level or amount of this enzyme present in the food must be consistent with GMP.

Other risk management considerations for this application are related to the regulatory approval, enzyme and source microorganism nomenclature, specifications and labelling. These are discussed below.

2.3.1 Regulatory approval

As stated above, FSANZ has prepared a draft variation to permit the use of the enzyme as a processing aid in the production of potable alcohol and starch and gluten fractions.

2.3.2 Enzyme nomenclature, source microorganism nomenclature and specifications

FSANZ notes the International Union of Biochemistry and Molecular Biology (IUBMB) lists the accepted name 'endo-1,4-beta-xylanase' for the enzyme EC 3.2.1.8 (see section 2.1 of SD1). This is the name used in the proposed draft variation.

Nomenclature for the host and gene donor organisms – *Bacillus licheniformis* and *C. cucumeris*, respectively – is in accordance with accepted international norms for bacterial taxonomy.

There are relevant identity and purity specifications in primary sources of specifications listed in Schedule 3 for enzyme preparations used in food processing (refer to section 1.3.2 of this report). This enzyme would have to comply with those specifications when added to food in accordance with the Code or sold for use in food.

2.3.3 Labelling

The labelling provisions in the Code will apply to foods for sale that are manufactured using this processing aid. See section 1.3.3 of this report.

2.3.4 Risk management conclusion

The risk management conclusion is to permit the enzyme endo-1,4-beta-xylanase from *B. licheniformis* containing the endo-1,4-beta-xylanase gene from *C. cucumeris* as a processing aid in the production of potable alcohol and starch and gluten fractions. If approved, the enzyme and its associated technological purpose would be listed in the table to subsection S18—9(3) of the Code, which includes enzymes permitted for a specific technological purpose. The maximum permitted level of the enzyme that may be present in the food would have to be an amount consistent with GMP.

2.4 Risk communication

2.4.1 Consultation

Consultation is a key part of FSANZ's standards development process. FSANZ developed and applied a standard communication strategy to this application. All calls for submissions are notified via the FSANZ Notification Circular, media release, FSANZ's digital channels and Food Standards News.

The process by which FSANZ approaches standards development matters is open, accountable, consultative and transparent. Public submissions are called to obtain the views of interested parties on the draft variation.

The draft variation will be considered for approval by the FSANZ Board taking into account all public comments received from this call for submissions.

2.4.2 World Trade Organization (WTO)

As members of the World Trade Organization (WTO), Australia and New Zealand are obliged to notify WTO members where proposed mandatory regulatory measures are not substantially the same as existing international standards and the proposed measure may have a significant effect on trade.

There are no relevant international standards (i.e. Codex Alimentarius Standards) and amending the Code to permit the use of this enzyme as a processing aid is unlikely to have a significant effect on international trade. Therefore, a notification to the WTO under Australia's and New Zealand's obligations under the WTO Technical Barriers to Trade or Application of Sanitary and Phytosanitary Measures Agreement was not considered necessary.

2.5 FSANZ Act assessment requirements

When assessing this application and the subsequent development of a food regulatory measure, FSANZ has had regard to the following matters in section 29 of the FSANZ Act:

2.5.1 Section 29

2.5.1.1 Consideration of costs and benefits

Changes have been made to the Impact Analysis requirements by the Office of Impact Analysis (OIA)⁴. Impact analysis is no longer required to be finalised with the OIA. Prior to these changes, the OIA advised FSANZ that a Regulation Impact Statement was not required for the applications relating to processing aids, OIA Reference: OIA23-06225. This is because applications relating to permitting the use of processing aids that have been determined to be safe are considered to be minor and deregulatory in nature, as their use will be voluntary if the draft variation concerned is approved. Under the new approach, FSANZ's assessment is that a regulation impact statement is not required for this application.

FSANZ, however, has given consideration to the costs and benefits that may arise from the proposed measure, for the purposes of meeting FSANZ Act considerations. The FSANZ Act requires FSANZ to have regard to whether costs that would arise from the proposed measure outweigh the direct and indirect benefits to the community, government or industry that would arise from the proposed measure (paragraph 29(2)(a)).

The purpose of this consideration is to determine if the community, government, and industry as a whole is likely to benefit, on balance, from a move from the status quo (where the status quo is rejecting the application). This analysis considers the costs and benefits of permitting the use of this enzyme endo-1,4-beta-xylanase (E.C. 3.2.1.8) as a processing aid in the production of potable alcohol and starch and gluten fractions. FSANZ is of the view that no other realistic food regulatory measures exist, however information received may result in FSANZ arriving at a different outcome.

The consideration of the costs and benefits in this section is not intended to be an exhaustive, quantitative economic analysis of the proposed measures. In fact, most of the effects that were considered cannot easily be assigned a dollar value. Rather, the assessment seeks to highlight the potential positives and negatives of moving away from the status quo by approving the proposed draft variation to the Code.

Consumers

FSANZ's risk assessment concludes there are no safety concerns from permitting the applicant's processing aid. Consumers in Australia and New Zealand may benefit from marginal price reductions of food products that are produced using the processing aid. That is assuming permitting the applicant's processing aid, through increased efficiency, reduces costs of producing those food products, and manufacturers pass-on a portion of any cost reductions to consumers.

Industry

Industry may benefit from increased choice of processing aids to produce alcoholic drinks and other food products. That may increase production efficiency and marginally reduce production costs. Industry may voluntarily use the applicant's new processing aid where they believe a commercial net benefit exists for them.

Government

The approval of this application may result in a small but likely inconsequential cost to government in terms of an addition to the current range of processing aids monitored for compliance.

Conclusion

⁴ Regulatory Impact Analysis Guide for Ministers' Meetings and National Standard Setting Bodies | The Office of Impact Analysis (pmc.gov.au)

FSANZ's assessment is that the direct and indirect benefits that would arise from permitting the applicant's processing aid as proposed, are likely to outweigh the associated costs. Information received, however, from this call for submissions, may result in FSANZ arriving at a different conclusion.

2.5.1.2 Other measures

There are no other measures (whether available to FSANZ or not) that would be more cost-effective than a food regulatory measure developed or varied as a result of the application.

2.5.1.3 Any relevant New Zealand standards

The relevant standards in the Code apply in Australia and New Zealand. There are no relevant New Zealand only standards.

2.5.1.4 Any other relevant matters

Other relevant matters are considered below.

2.5.2. Subsection 18(1)

FSANZ has also considered the three objectives in subsection 18(1) of the FSANZ Act during the assessment.

2.5.2.1 Protection of public health and safety

FSANZ undertook a risk and technical assessment and concluded there were no public health and safety concerns associated with the proposed use of this enzyme (see section 2 of this report and SD1).

2.5.2.2 The provision of adequate information relating to food to enable consumers to make informed choices

The labelling requirements for this enzyme are discussed in sections 1.3.3 and 2.3.3 of this report.

2.5.2.3 The prevention of misleading or deceptive conduct

There were no issues identified with this application relevant to this objective.

2.5.3 Subsection 18(2) considerations

FSANZ has also had regard to:

the need for standards to be based on risk analysis using the best available scientific evidence

FSANZ used the best available scientific evidence to conduct the risk analysis. The applicant submitted a dossier of information and scientific literature as part of their application. This dossier, together with other technical and scientific information, was considered by FSANZ in assessing the application. The risk assessment is provided in SD1.

the promotion of consistency between domestic and international food standards

In terms of food safety, the relevant international standard setting body is the Codex Alimentarius Commission (Codex). There is no Codex 'general standard' for enzymes,

however as noted in section 1.3.2 of this report, there are internationally recognised specifications for enzyme preparations established by JECFA and Food Chemicals Codex, with which this enzyme would have to comply when added to food in accordance with the Code or sold for use in food.

There is also a Codex guideline, Guidelines on Substances used as Processing Aids (CAC/GL 75-2010), which sets out general principles for the safe use of substances used as processing aids, including that substances used as processing aids shall be used under conditions of GMP (see section 1.4.1 of this report).

• the desirability of an efficient and internationally competitive food industry

Australia and New Zealand will remain competitive with international markets where approval for the use of the enzyme is granted. This will also help foster continued innovation and improvements in food manufacturing techniques and processes.

The conclusion of the risk and technical assessment is that there are no public health and safety concerns associated with the proposed use of this enzyme as a processing aid. It is therefore appropriate that Australian and New Zealand food industries are given the opportunity to benefit from the use of this enzyme for the applications proposed by the applicant. Ultimately, the food industry will make their own economic decisions, taking into account the costs and benefits of using the new enzyme, to determine if it is of benefit to their particular business.

the promotion of fair trading in food

No issues were identified for this application relevant to this objective.

• any written policy guidelines formulated by the Forum on Food Regulation

The Ministerial Policy Guideline Addition to Food of Substances other than Vitamins and Minerals⁵ includes specific order policy principles for substances added to achieve a solely technological function, such as processing aids. These specific order policy principles state that permission should be granted where:

- the purpose for adding the substance can be articulated clearly by the manufacturer as achieving a solely technological function (i.e. the 'stated purpose')
- the addition of the substance to food is safe for human consumption
- the amounts added are consistent with achieving the technological function
- the substance is added in a quantity and a form which is consistent with delivering the stated purpose
- no nutrition, health or related claims are to be made in regard to the substance.

FSANZ determined that permitting the proposed use of this enzyme would be consistent with these specific order policy principles for 'technological function'. All other relevant requirements of the policy guideline would be similarly met.

⁵ <u>https://www.foodregulation.gov.au/resources/publications/policy-guideline-addition-substances-other-vitamins-and-minerals</u>

3 Draft variation

The draft variation to the Code is at Attachment A and is intended to take effect on gazettal.

A draft explanatory statement is at Attachment B. An explanatory statement is required to accompany an instrument if it is lodged on the Federal Register of Legislation.

Attachments

- A. Draft variation to the Australia New Zealand Food Standards Code
- B. Draft Explanatory Statement

Attachment A – Draft variation to the Australia New Zealand Food Standards Code



Food Standards (Application A1304 – Endo-1,4-beta-xylanase from *Bacillus licheniformis* (gene donor: *Chryseobacterium cucumeris*) for use as a processing aid) Variation

The Board of Food Standards Australia New Zealand gives notice of the making of this variation under section 92 of the *Food Standards Australia New Zealand Act 1991*. The variation commences on the date specified in clause 3 of this variation.

Dated [To be completed by the Delegate]

[Insert name and position of Delegate]

Delegate of the Board of Food Standards Australia New Zealand

Note:

This variation will be published in the Commonwealth of Australia Gazette No. FSC XX on XX Month 20XX. This means that this date is the gazettal date for the purposes of clause 3 of the variation.

1 Name

This instrument is the *Food Standards (Application A1304 – Endo-1,4-beta-xylanase from* Bacillus licheniformis *(gene donor:* Chryseobacterium cucumeris*) for use as a processing aid) Variation.*

2 Variation to a standard in the Australia New Zealand Food Standards Code

The Schedule varies a Standard in the Australia New Zealand Food Standards Code.

3 Commencement

The variation commences on the date of gazettal.

Schedule

Schedule 18—Processing aids

[1] Subsection S18—9(3) (table)

Insert:

Endo-1,4-beta-xylanase (EC 3.2.1.8), sourced from *Bacillus licheniformis* containing the endo-1,4-beta-xylanase gene from *Chryseobacterium cucumeris*

For use in the production of:

- **GMP**
- (a) potable alcohol; and
- (b) starch and gluten fractions.

Attachment B – Draft Explanatory Statement

DRAFT EXPLANATORY STATEMENT

Food Standards Australia New Zealand Act 1991

Food Standards (Application A1304 – Endo-1,4-beta-xylanase from Bacillus licheniformis (gene donor: Chryseobacterium cucumeris) for use as a processing aid)

Variation

1. Authority

Section 13 of the *Food Standards Australia New Zealand Act 1991* (the FSANZ Act) provides that the functions of Food Standards Australia New Zealand (the Authority) include the development of standards and variations of standards for inclusion in the *Australia New Zealand Food Standards Code* (the Code).

Division 1 of Part 3 of the FSANZ Act specifies that the Authority may accept applications for the development or variation of food regulatory measures, including standards. This Division also stipulates the procedure for considering an application for the development or variation of food regulatory measures.

The Authority accepted Application A1304 which seeks to permit the use of the enzyme endo-1,4-beta-xylanase (E.C. 3.2.1.8) from *Bacillus licheniformis* containing the xylanase gene from *Chryseobacterium cucumeris* as a processing aid in the production of potable alcohol and production of starch and gluten fractions. The Authority considered the Application in accordance with Division 1 of Part 3 and has prepared a draft variation - the *Food Standards (Application A1304 – Endo-1,4-beta-xylanase from* Bacillus licheniformis *for use as a processing aid) Variation* (the draft variation).

2. Variation will be a legislative instrument

If approved, the draft variation would be a legislative instrument for the purposes of the *Legislation Act 2003* (see section 94 of the FSANZ Act) and be publicly available on the Federal Register of Legislation (www.legislation.gov.au).

If approved, this instrument would not be subject to the disallowance or sunsetting provisions of the *Legislation Act 2003*. Subsections 44(1) and 54(1) of that Act provide that a legislative instrument is not disallowable or subject to sunsetting if the enabling legislation for the instrument (in this case, the FSANZ Act): (a) facilitates the establishment or operation of an intergovernmental scheme involving the Commonwealth and one or more States; and (b) authorises the instrument to be made for the purposes of the scheme. Regulation 11 of the *Legislation (Exemptions and other Matters) Regulation 2015* also exempts from sunsetting legislative instruments a primary purpose of which is to give effect to an international obligation of Australia.

The FSANZ Act gives effect to an intergovernmental agreement (the Food Regulation Agreement) and facilitates the establishment or operation of an intergovernmental scheme (national uniform food regulation). That Act also gives effect to Australia's obligations under an international agreement between Australia and New Zealand. For these purposes, the Act establishes the Authority to develop food standards for consideration and endorsement by the Food Ministers Meeting (FMM). The FMM is established under the Food Regulation Agreement and the international agreement between Australia and New Zealand, and consists of New Zealand, Commonwealth and State/Territory members. If endorsed by the FMM, the food standards on gazettal and registration are incorporated into and become part of Commonwealth, State and Territory and New Zealand food laws. These standards or

instruments are then administered, applied and enforced by these jurisdictions' regulators as part of those food laws.

3. Purpose

The Authority has prepared a draft variation amending the table to subsection S18—9(3) in Schedule 18 of the Code to permit the use of the enzyme endo-1,4-beta-xylanase (E.C. 3.2.1.8) sourced from *Bacillus licheniformis* containing the endo-1,4-beta-xylanase gene from *Chryseobacterium cucumeris* as a processing aid in the production of potable alcohol and production of starch and gluten fractions. If approved, this permission would be subject to the condition that the maximum permitted level or amount of the enzyme that may be present in the food must be consistent with good manufacturing practice (GMP).

4. Documents incorporated by reference

The draft variation does not incorporate any documents by reference.

However, existing provisions of the Code incorporate documents by reference that would prescribe identity and purity specifications for the processing aid to be permitted by the draft variation. Section 1.1.1—15 of the Code requires substances used as processing aids to comply with any relevant identity and purity specifications listed in Schedule 3 of the Code when added to food in accordance with the Code or sold for use in food. Section S3—2 of Schedule 3 incorporates by reference the specifications listed in the Joint FAO/WHO Expert Committee on Food Additives (JECFA) Compendium of Food Additive Specifications (FAO/WHO 2021) and the United States Pharmacopeial Convention (2022) Food Chemicals Codex (13th edition). These include general specifications for the identity and purity parameters of enzyme preparations used in food processing.

5. Consultation

In accordance with the procedure in Division 1 of Part 3 of the FSANZ Act, the Authority's consideration of A1304 will include one round of public consultation following an assessment and the preparation of a draft variation and associated assessment summary. A call for submissions (including the draft variation) will be open for a six-week consultation period. Further details of the consultation process, the issues raised during consultation and by whom, and the Authority's response to these issues are available in an approval report published on the Authority's website at www.foodstandards.gov.au.

Changes have been made to the impact analysis requirements by the Office of Impact Analysis (OIA)⁶. Impact analysis is no longer required to be finalised with the OIA. Under the new approach to impact analysis, FSANZ will assess whether an application requires a regulation impact statement. FSANZ's assessment is that a regulatory impact statement is not required for this application. Prior to these changes, the OIA advised FSANZ that a Regulation Impact Statement (RIS) was not required for the applications relating to processing aids. This is because applications relating to permitting the use of processing aids that have been determined to be safe are minor and deregulatory in nature, as their use will be voluntary if the draft variation concerned is approved. FSANZ's decision not to develop a regulation impact statement for this application is consistent with the OIA's prior advice.

6. Statement of compatibility with human rights

If approved, this instrument would be exempt from the requirements for a statement of

⁶ Regulatory Impact Analysis Guide for Ministers' Meetings and National Standard Setting Bodies | The Office of Impact Analysis (pmc.gov.au)

compatibility with human rights as it is a non-disallowable instrument under section 44 of the Legislation Act 2003.

7. Variation

References to 'variation' in this section are references to the draft variation.

Clause 1 of the variation provides that the name of the variation is the *Food Standards* (Application A1304 – Endo-1,4-beta-xylanase from Bacillus licheniformis (gene donor: Chryseobacterium cucumeris) for use as a processing aid) Variation.

Clause 2 of the variation provides that the Code is amended by the Schedule to the variation.

Clause 3 of the variation provides that the variation will commence on the date of gazettal of the instrument.

Schedule to the variation

Item [1] of the Schedule to the variation would insert a new entry, in alphabetical order, into the table to subsection S18—9(3) of the Code.

The new entry would consist of the following enzyme in column 1 of the table:

• 'endo-1,4-beta-xylanase (E.C. 3.2.1.8) sourced from *Bacillus licheniformis* containing the endo-1,4-beta-xylanase gene from *Chryseobacterium cucumeris*'

The permitted technological purpose for this enzyme would be prescribed in column 2 of the table i.e. for use in the production of potable alcohol and production of starch and gluten fractions.

The permission would be subject to the condition, as prescribed in column 3 of the table, that the maximum permitted level or amount of this enzyme that may be present in the food must be consistent with GMP.

If approved, the effect of the proposed amendment would be to permit the proposed use of the enzyme, endo-1,4-beta-xylanase (E.C. 3.2.1.8) sourced from *Bacillus licheniformis* containing the endo-1,4-beta-xylanase gene from *Chryseobacterium cucumeris* as a processing aid in accordance with the Code.