IMPQI277

Apply Six Sigma methodology in food and drink operations

Overview

This standard is about the skills and knowledge needed to apply Six Sigma methodology as part of your organisation's drive to increase the effectiveness and productivity of food and drink operations. This is important in the achievement of excellence and the success of manufacture, processing and supply across the food and drink supply chain.

You will need to show and understand how Six Sigma methodology is applied in your organisation. You will need to understand parts per million opportunities, and calculation of defects per million. You will also need to know the five phases of Six Sigma and the critical to quality characteristic. You need to understand how to comply with your company policy for improvement, understand the level of your responsibility for your actions, and know how to refer any issues outside of the limit of your authority to others.

This standard is for you if your role requires you to apply Six Sigma methodology in work areas and activity in food and drink operations including, manufacturing, processing, packing or supply chain activities. You may have responsibilities for aspects of organisational improvement in a team leadership or management role.

Performance criteria

You must be able to:

Scope the area where Six Sigma methodology is to be applied

1.identify the requirements of the improvement strategy and plan
2.collate information and seek advice about the area where improvement activity is intended in accordance with procedures
3.confirm current performance outcomes and achievement of any existing targets in accordance with the improvement plan
4.evaluate the methodology needs of the area in consultation with relevant personnel

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5.collate resources to commence the application in accordance with procedures
6.apply Six Sigma methodology in accordance with the improvement plan
7.present information and data in ways that promotes understanding with relevant personnel
8.communicate outcomes to the relevant personnel

Obtain and provide feedback about your contribution to the methodology

9.seek feedback on the value of your contribution from relevant personnel
10.provide feedback on your contribution to the relevant personnel

Knowledge and understanding

You need to know and understand:

1. how the health, safety and hygiene requirements of a work area can influence Six Sigma methodology
2. the application of Six Sigma methodology in meeting the business objectives set out in your organisation's improvement strategy and plan
3. the Six Sigma infrastructure and philosophy
4. the benefits that will arise from a Six Sigma project
5. the `parts per million opportunities' goal of Six Sigma
6. the calculation of defects per million opportunities (DPMO)
7. the five phases of Six Sigma that are applied to a project
8. critical to quality characteristic (CTQC) and how they are defined
9. how non-value added activity can serve as a roadblock for achieving Zero Defect
10. what an `opportunity for defect' is and how it is defined
11. the roles and responsibilities of the key personnel in the Six Sigma process
12. the relationship between key process input variables (KPIV) and key process output variables (KPOV) (using the equation Y=(f)x)
13. the extent of your own authority, and to whom you should report in the event of problems that you cannot resolve

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