ISO/IEC 17025:2017 “Corrective Action 8.7 ”

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ISO/IEC 17025:2017 "Corrective Action"

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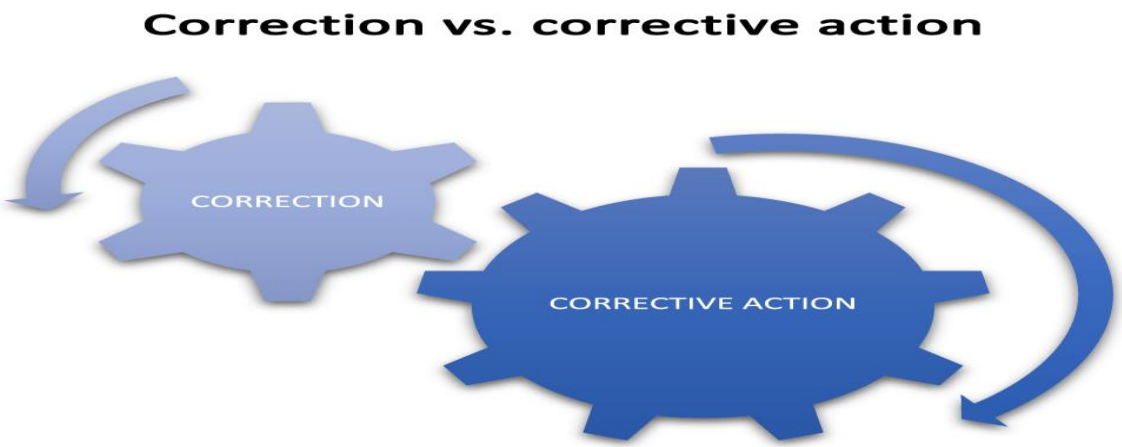
Duration of webinar is set for one hour.

You can type any questions directly into your webinar box; We will review them at the conclusion of today's session;

Corrective Action

- Corrective action is an activity that shall be used to stop **the re-occurrence** of non-conformities
- Corrective action has to be initiated when a problem exists. Remedial action can easily be confused with corrective action. Remedial action or correction is taken to rectify the mistake. Corrective action is an action to eliminate defined non-conformities and prevent reoccurrences.



Sources of Corrective Action

- Internal Audits
- External Audits
- Complaints
- Nonconforming Work
- Internal Sources to your Organization

Corrective Action

8.7.1 When a nonconformity occurs, the laboratory **shall:**

a) react to the nonconformity and, as applicable:

— take action to control and correct it;

— address the consequences

Example: To recall a test report and make necessary changes is a remedial action or correction because making changes in the report does not help to prevent **re-occurrence** of non-conformities

Corrective Action

8.7.1 When a nonconformity occurs, the laboratory shall

b) evaluate the need for action to eliminate the cause(s) of the nonconformity, in order that it does not recur or occur elsewhere, by:

— reviewing and analyzing the nonconformity;

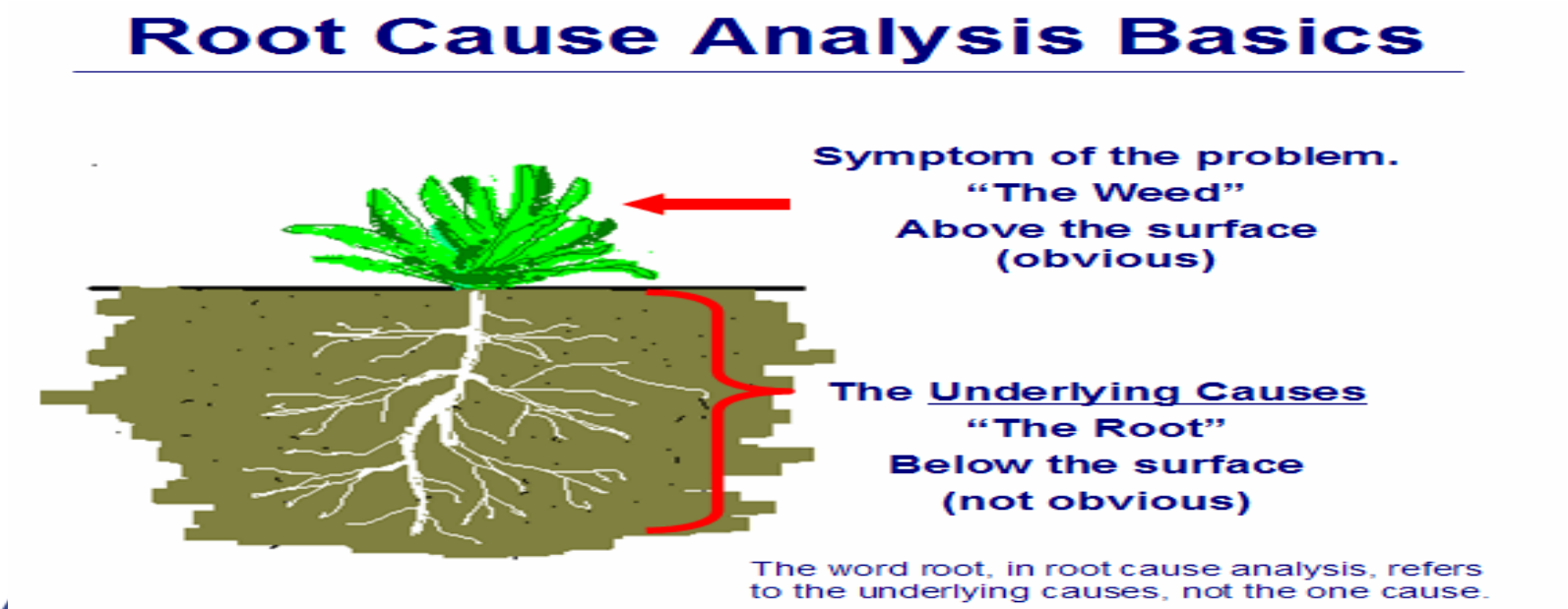
— determining the causes of the nonconformity;

— determining if similar nonconformities exist, or could potentially occur

As in the report example, if this is the third correction this month due to errors then may need to take it futher and look into the review, and authorization of reports

Corrective Action

ISO/IEC 17025: 2017 Standard indicates that in the corrective action process the causes need to be evaluated.. Cause analysis is the important and most difficult step in the process. Any kind of mistake in this step may cause the implementation of wrong corrective action and does not avoid re-occurrence of non-conformities.

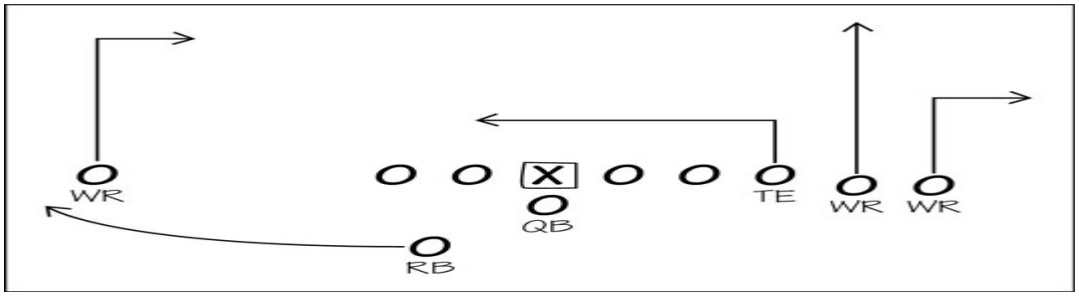


Corrective Action

8.7.1 When a nonconformity occurs, the laboratory shall:

c) implement any action needed

Necessary conditions for corrective action should be clearly defined. The laboratory management should be confident about the effectiveness and the performance of the corrective action.



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Corrective Action

8.7.1 When a nonconformity occurs, the laboratory shall:

d) review the effectiveness of any corrective action taken;

The result of the corrective actions shall be monitored for determining the effectiveness of the corrective actions. Monitoring should verify the successful completion of the identified actions and assess the effectiveness of the actions taken.

- Time needs to pass to determine the effectiveness

Corrective action is a required input for the management review

Corrective Action

8.7.1 When a nonconformity occurs, the laboratory **shall**

e) update risks and opportunities determined during planning, if necessary;

ISO/IEC 17025:2017 requires the laboratory to plan and implement actions to address risks and opportunities.

Lab should incorporate asking itself: Are there any risks are opportunities presented during the course of implementing this corrective action?

Corrective Action

8.7.1 When a nonconformity occurs, the laboratory shall

f) make changes to the management system, if necessary;

Corrective Action

8.7.2 Corrective actions shall be appropriate to the effects of the nonconformities encountered.

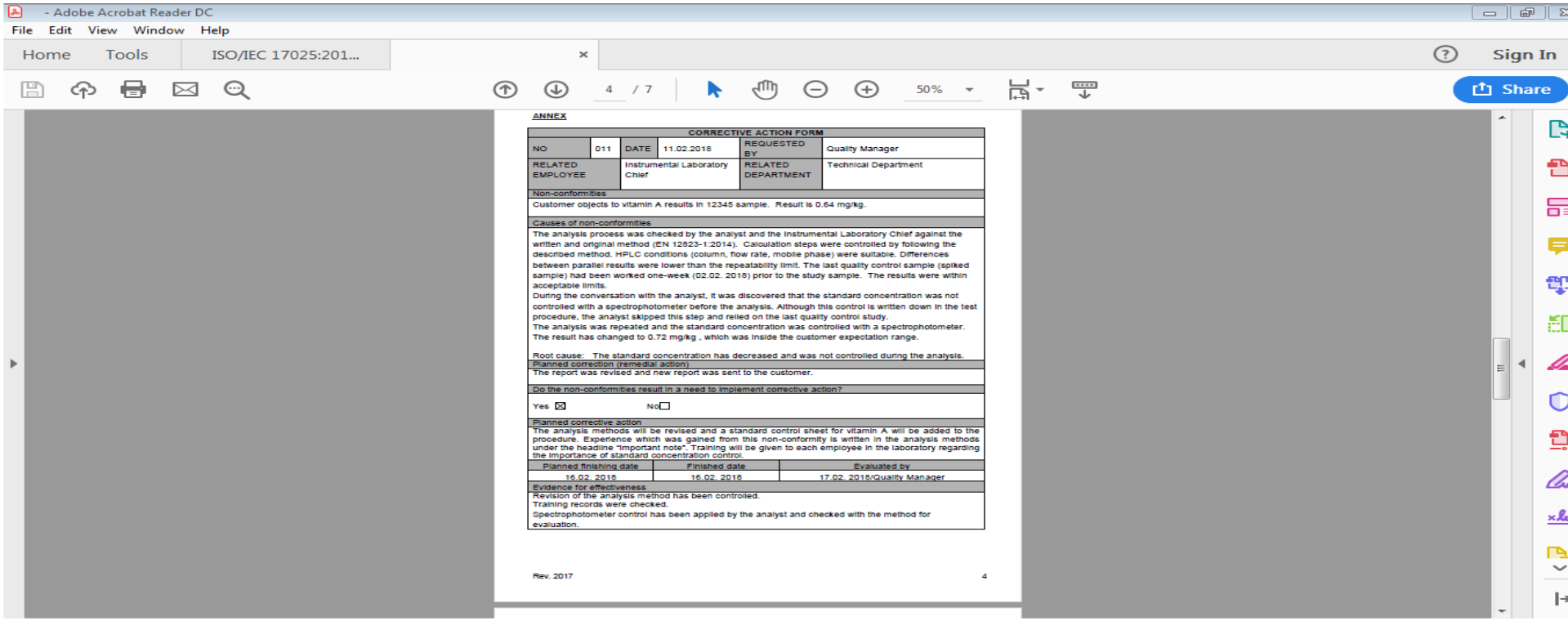
What was the impact on laboratory results???

Corrective Action

8.7.3 The laboratory shall retain records as evidence of:

a) the nature of the nonconformities, cause(s) and any subsequent actions taken;

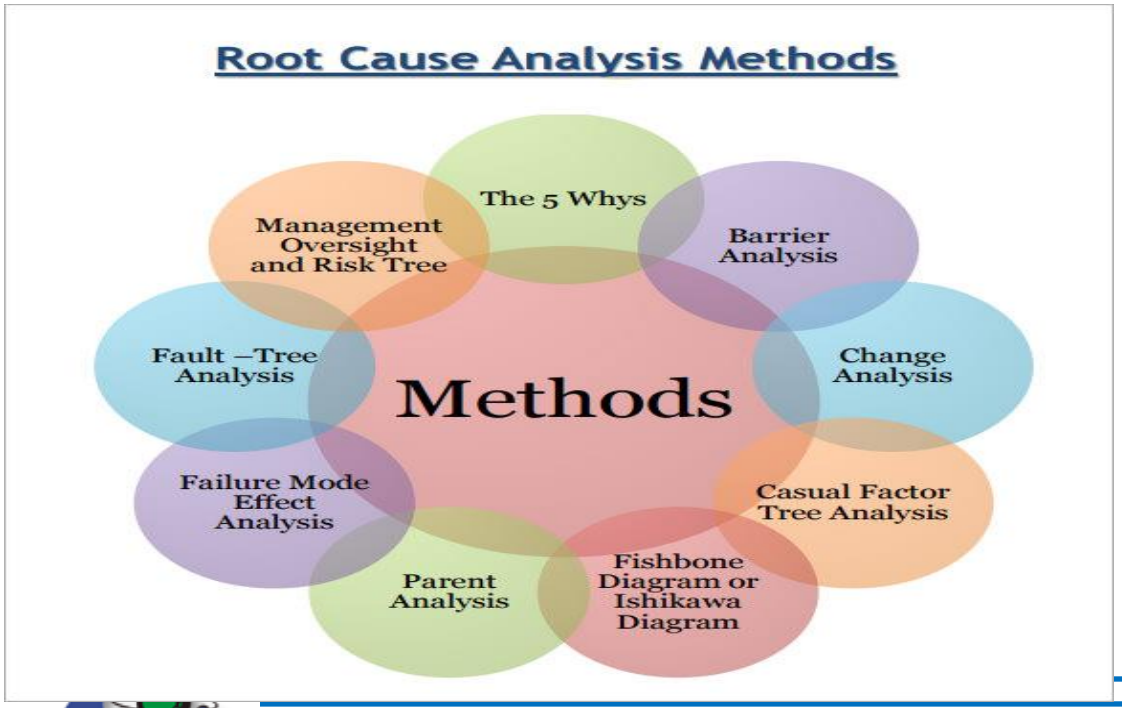
b) the results of any corrective action.



Corrective Action

Techniques for Root Cause Analysais

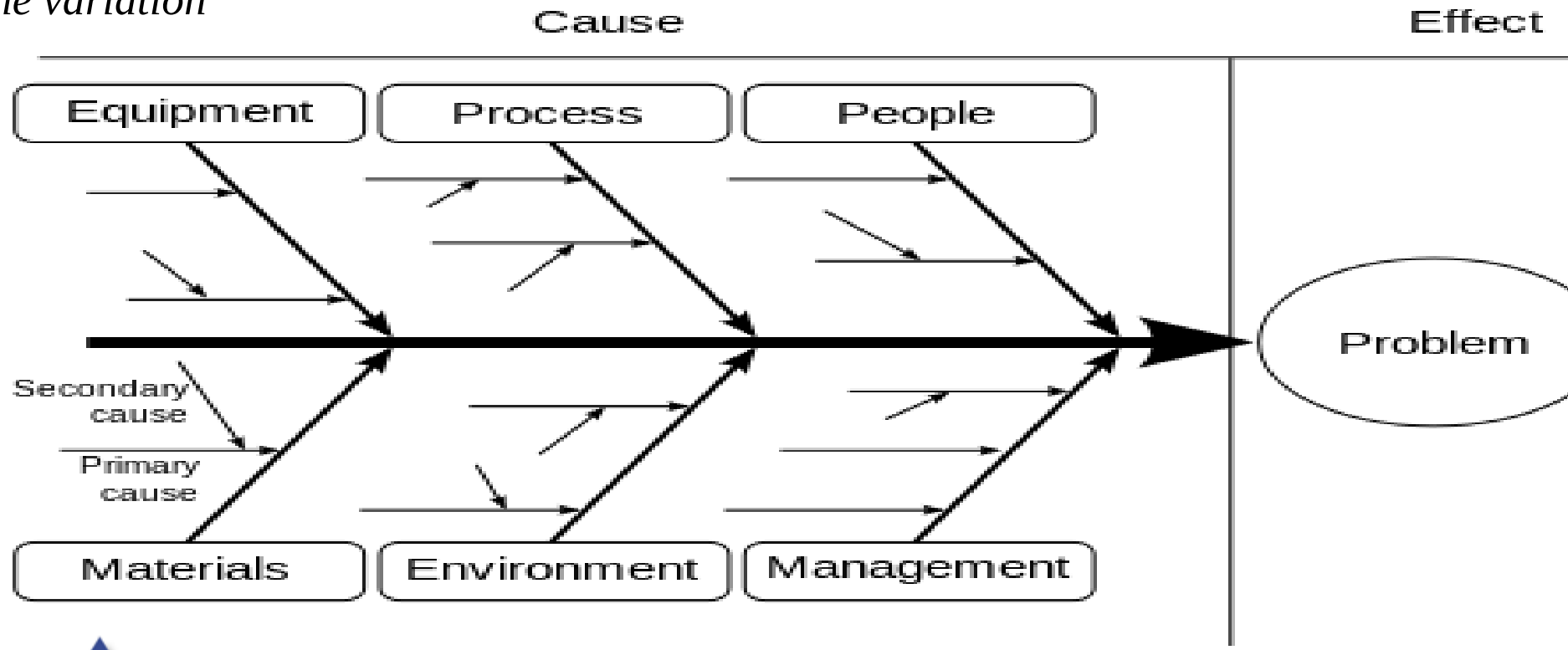
A root cause analysis should be performed as soon as possible after the error or variance occurs. otherwise, important details may be missed. All of the personnel involved in the error should be involved in the analysis. Without all parties present, the discussion may le to fictionalization or speculation that will dilute the facts



need to dig down past the surface

Fishbone or Ishikawa or Cause-and-Effect Diagrams

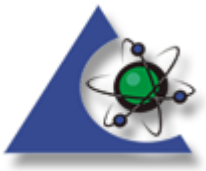
This will group causes into categories. This may include people, measurements, methods, materials, environment and machines. The fishbone diagram forces you to consider all possible causes of a problem instead of focusing on the most obvious one. Here causes are grouped into several categories to easily identify the correct source of the variation



Fishbone or Ishikawa or Cause-and-Effect Diagrams

Categories are very broad and might include things like "People" or "Environment." After grouping the categories, we break those down into the smaller parts. For example, under "People" we might consider potential root cause factors like "leadership," "staffing," or "training."

As we dig deeper into potential causes and sub-causes, questioning each branch, we get closer to the sources of the issue. We can use this method eliminate unrelated categories and identify correlated factors and likely root causes. For the sake of simplicity, carefully consider the categories before creating a diagram



Fishbone or Ishikawa or Cause-and-Effect Diagrams

Common categories to consider in a Fishbone diagram:

Machine (equipment, technology), Method (process), Material (includes raw material, consumables, and information), Man/mind power (physical or knowledge work), Measurement (inspection), Mission (purpose, expectation), Management / money power (leadership), Maintenance, Product (or service), Price, Promotion (marketing), Process (systems), People (personnel), Physical evidence, Performance, Surroundings (place, environment), Suppliers, Skills

As we dig deeper into potential causes and sub-causes, questioning each branch, we get closer to the sources of the issue. We can use this method eliminate unrelated categories and identify correlated factors and likely root causes

Brainstorming

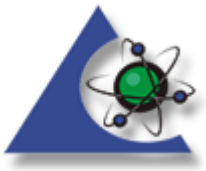
The person facilitating the meeting has two roles; first, to assure that the steps are properly executed and second, help assure the discussion stays on topic in regard to finding the root cause of the problem you are trying to solve.

In addition to all the great ideas you can get from a Brainstorming session, it can also benefit you with regard to company politics. This is the case because the people involved in the Brainstorming session will be more likely to support the resulting action items because they were involved the process that created the solution. Remember this point when trying to decide who to invite to the meeting. After all, the people who are not part of the solution, may in turn become part of the problem

5 Whys

One of the more common techniques in performing a root cause analysis is the 5 Whys approach. We may also think of this as the annoying toddler approach. For every answer to a WHY question, follow it up with an additional, deeper “Ok, but WHY?” question.

Five is an arbitrary figure. The theory is that after asking why five times you will probably arrive at the root cause. The root cause has been identified when asking why doesn’t provide any more useful information.



5 Whys

The 5 Whys technique was developed and fine-tuned within the Toyota Motor Corporation as a critical component of its problem-solving training. Toyota encouraged teams to dig into each problem that arose until they found the root cause. "

Here's an example Toyota offers *of a potential 5 Whys that might be used at one of their plants.*

1. **"Why did the robot stop?"**
   The circuit has overloaded, causing a fuse to blow.
2. **"Why is the circuit overloaded?"**
   There was insufficient lubrication on the bearings, so they locked up.
3. **"Why was there insufficient lubrication on the bearings?"**
   The oil pump on the robot is not circulating sufficient oil.
4. **"Why is the pump not circulating sufficient oil?"**
   The pump intake is clogged with metal shavings.
5. **"Why is the intake clogged with metal shavings?"**
   Because there is no filter on the pump.

5 Whys

Problem statement – An employee fell and was injured during the first shift start up.

Why did Mr. Smith fall and was injured during the first shift start up?

Why?

5 Whys

There was an oil spill on the floor in the machining department

Why?

A Seal in machine 2 deteriorated and began cracking and leaked oil.

Why?

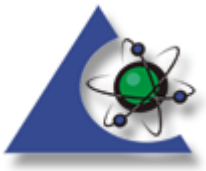
The seal material was not robust to the application

Why?

Lower cost seals purchased from new supplier

Why?

Seal material not specified in service manuals



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This time is allocated for answering questions. You should have a space provided for submitting questions.

Please keep questions related to the topic covered in this webinar;

Save the Date

Next PJLA Webinar

Wednesday, Sep 29th 2021

ISO/IEC 17025:2017 Section 6.6

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