

Session 20

Environmental management, resource efficiency and continuous improvement

Like any other management systems, a company that wants to implement a chemical/environmental management system (C/EMS), needs to clearly define the scope. Depending on the manufacturing processes the scope includes resource efficiency. And a monitoring system need to be integrated to measure the continuous improvement.

The implementation of this session will require about 2 hours and 20 minutes.

Learning outcomes

At the end of this session, the participants will be able to

1. recognize environmental management, in particular pollution, and preventive measures.
2. identify opportunities from Best Available Techniques (BAT) and get to know more sustainable alternatives.
3. understand how Continual Improvement helps to reduce the impact on the environment and implement more sustainable practices

Training materials required

Presentations	Handouts/Worksheets	Reading
PPT 20_ Environmental management, resource efficiency, and continuous improvement	Workbook session 20	REMC Company Handbook – sections 1.4,2.3,7.1,7.2,7.3

Session plan

Time in min	Content/Activity	Reference/Material
5	Introduction <ul style="list-style-type: none">• Present learning outcomes and overview of the session	<i>PPT 20_ Environmental management, resource efficiency, and continuous improvement Slides 1-2</i>
10	Presentation - Environmental standard and pollution Discuss on <ul style="list-style-type: none">• Different environmental standards• Pollutions from textile wet process factories• Impacts of pollution on health and environment	<i>PPT 20_ Environmental management, resource efficiency, and continuous improvement slides 4-9</i>

Time in min	Content/Activity	Reference/Material
30	<p>Presentation - Air pollution Discuss on</p> <ul style="list-style-type: none"> • Types of pollutants • Typical air emission from textile factory • Volatile Organic Compounds <p>Exercise: Knowledge sharing within group:</p> <ul style="list-style-type: none"> • What actions have you taken in your facility so far to reduce your environmental impact? • What worked well? • What did not work so well? <p>Presentation - Pollution prevention:</p> <ul style="list-style-type: none"> • Air emission treatment technologies • Different options to reduce air pollutions 	<p><i>PPT 20_ Environmental management, resource efficiency, and continuous improvement</i></p> <p>Slide 10-20</p> <p>Workbook session 20</p> <p><i>PPT 20_ Environmental management, resource efficiency, and continuous improvement</i></p> <p>Slide 21-25</p>
10	<p>Presentation - Best Available Techniques (BAT)</p> <ul style="list-style-type: none"> • What BAT is for textile industry? • BAT checklist 	<p><i>PPT 20_ Environmental management, resource efficiency, and continuous improvement</i></p> <p>Slide 26-30</p>
75	<p>Presentation - More sustainable alternatives:</p> <ul style="list-style-type: none"> • Different Cleaner Production(CP) and resource efficiency opportunities for textile industry <p>Group exercise:</p> <ul style="list-style-type: none"> • Which Best Available Techniques have you applied? • Which experiences have you made? • Which further Best Available Techniques are you aware of? <p>Ask the groups to present their experience to the peers.</p>	<p><i>PPT 20_ Environmental management, resource efficiency, and continuous improvement</i></p> <p>Slide 31-59</p> <p>Workbook session 20</p>
10	<p>Presentation - Continual Improvement Process</p> <ul style="list-style-type: none"> • Environmental improvement process • Plan-Do-Check-Act methodology 	<p><i>PPT 20_ Environmental management, resource efficiency, and continuous improvement</i></p> <p>Slides 61-65</p>
5	<p>Closing</p> <ul style="list-style-type: none"> • Q&A • Summaries key points of the session 	<p><i>PPT 20_ Environmental management, resource efficiency, and continuous improvement</i></p> <p>slides 66-67</p>