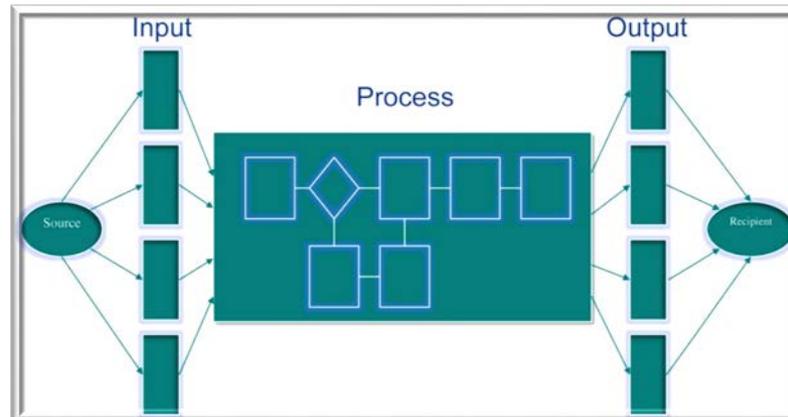


Biorisk Implementation

Process Mapping



Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

2011-6636 C

Group Exercise #1

In your group, take 10 min to discuss and answer the following question:

What and who is involved in managing waste in the laboratory?

Report your answers



Biological Waste Management

- Waste
- Equipment
- People
- Procedures
- Documents
- Resources

Definition of a Process

- Simple: How things get done
- Formal: A process is a series of definable, repeatable and measurable, verifiable, steps;
- ...which transforms some input from a supplier into a useful, “value added”, result or output for an internal or external customer

Question:

Where does a process reside if it is not documented?



Question:

Can you think of an example of a process that is not repeatable?

Process Mapping - Definition

- A process map is a *graphical* chart that shows how work flows through the functions in an organization.
- It captures and records the sequence of steps required to convert inputs to outputs

Question:

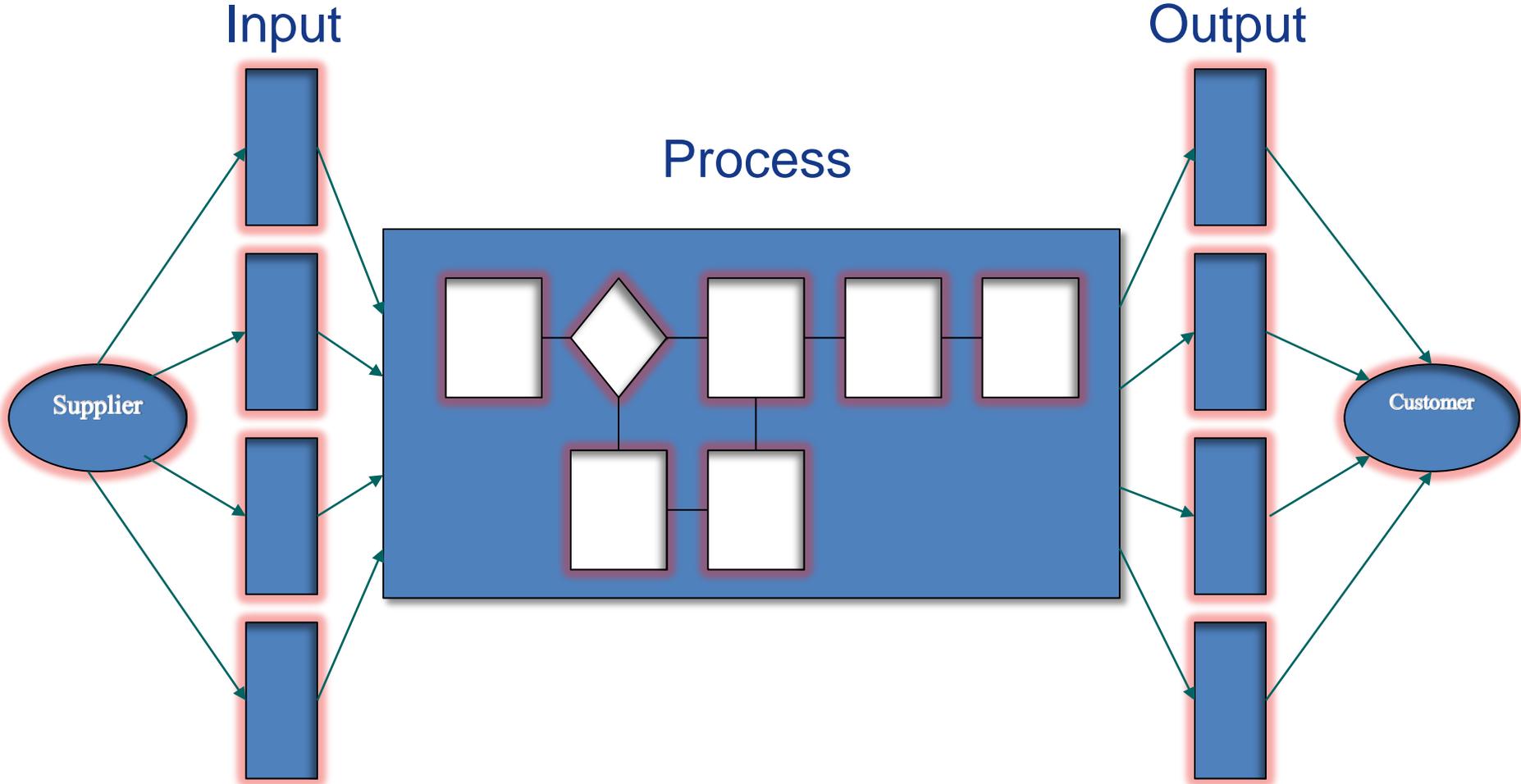
Why do process mapping?



Why do Process Mapping?

- “A picture is worth a thousand words”
- Promotes process improvement
- Identify issues/weaknesses
- Links employees duties to others
- Helps train people
- Defines how work is performed

Process Mapping



Process Mapping Levels

- Level 1
 - High level
 - The “What”
- Level 2
 - Shows process in more detail
 - The “Who does What”
- Level 3
 - Transactional Level
 - Sometimes referred to as a Flow Chart
 - The “How”

Process Mapping Levels

Process mapping levels have
NOTHING to do with Biosafety
Levels

Process Mapping Levels



Forest

Level 1



Trees

Level 2



Roots

Level 3

Level 1 Map – The What

- A level 1 map shows the process at its highest level
- Typical 5-7 steps
- Useful to orient management to what you are doing
- *Defines the scope of the process*



Group Exercise 2

In your groups, take 15 minutes and develop:

- Level 1 Map for “Risk Assessment Process”

Focus on the ‘What’

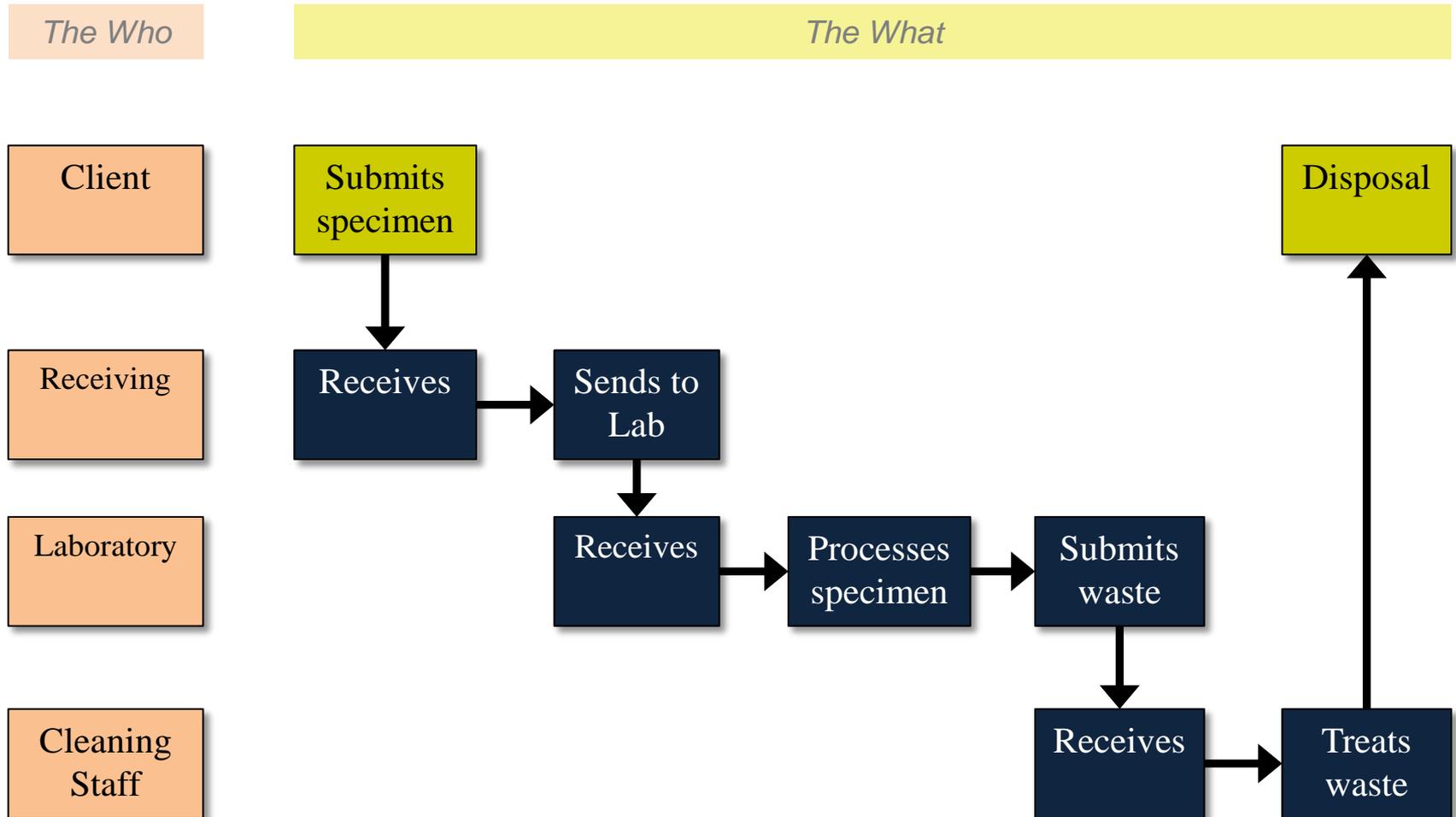
Use the flipcharts and post-it-notes

Level 2 Map

- The **Who does What?**
- A level two map shows the process in more detail



Level 2 Map



Group Exercise 3

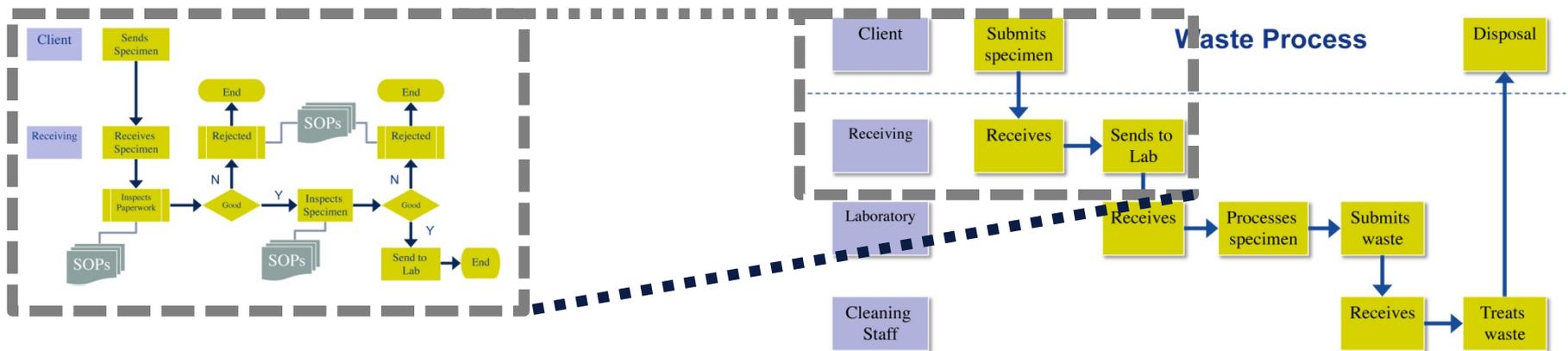
In your groups, take 30 minutes and develop:

- Level 2 Map for “Infectious Waste Treatment”

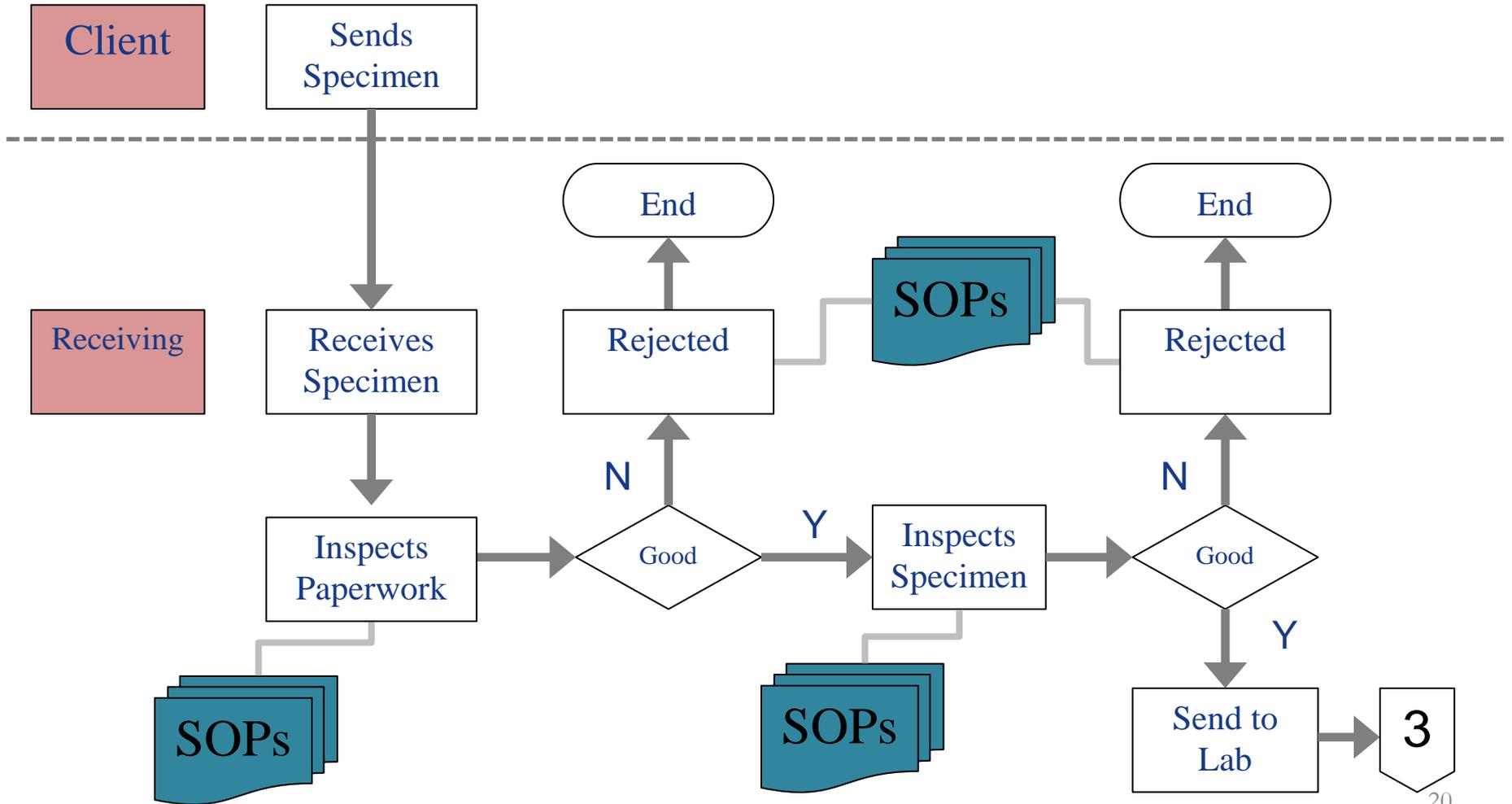
Use the flipcharts and post-it-notes

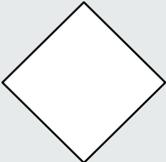
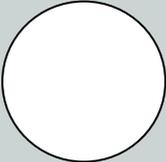
Level 3 Map – The How?

- A level 3 map shows the process at a transactional level
- Sometimes referred to as a Flow Chart



Level 3 Map – The How?



Symbol	Name	Description
	Activity	Show a Process or action step. Most common symbol in process mapping
	Decision	Indicates a question or branch in the process flow. Typically, a decision shape is used when there are two options (Yes/No, No/No-Go, etc.)
	On-Page Connector	This symbol is typically small and is used as a Connector to show a jump from one point in the process flow to another. Connectors are usually labeled with capital letters (A, B, AA) to show matching jumping points
	Document	The document symbol indicates the generation of records or documents or the use of documents (SOPs) for the process
	Trigger Terminator	Terminators show the start and stop points in a process.

Group Exercise 5

In your groups, take 30 minutes and develop:

- Level 3 Map for “Autoclaving Solid Waste” (include decision points, documents, inputs, outputs)

Use the flipcharts and post-it-notes

What to look for

- Redundancy
- Too many humans in the loop
- Too many hand off points. –cross lanes
- Bottlenecks
- Gaps
- Overreliance on systems – email
- Functions/roles vs. people
- Multiple authorities
- Multiple meetings
- Value added vs non-value added

Resources

- Use of Software
 - Microsoft Word
 - Microsoft PowerPoint
 - Visio (Microsoft)
 - RF Flow
 - iGrafx
- Without software
 - Post-it notes
 - Whiteboards
 - Flipcharts
 - Sticky wall

Process Mapping – Wrap Up

- Purpose and use of process maps
- Symbols
- Three levels