Teambuilder: "TOXIC WASTE"

Target Audience: All Teams

Purpose

"Teambuilder" PACEsetters are designed to put a select group of people into a simulated scenario in order to help the individuals grow closer together and identify as a team. The scenarios include stressors (i.e. complicated problems, time limits, resource constraints, etc.) that are used to help make the scenario challenging, fun, and educational. Each Teambuilder is designed in such a way that allows for flexibility and creativity in its execution. Feel free to experiment with them and please share the results with us at the contact information located at the bottom of this page.

Description

This Teambuilder is a physical scenario designed to:

1. Help individuals work together in a time constrained environment
2. Force collaboration on how a task should best be accomplished
3. Test creative thinking in successfully completing the task

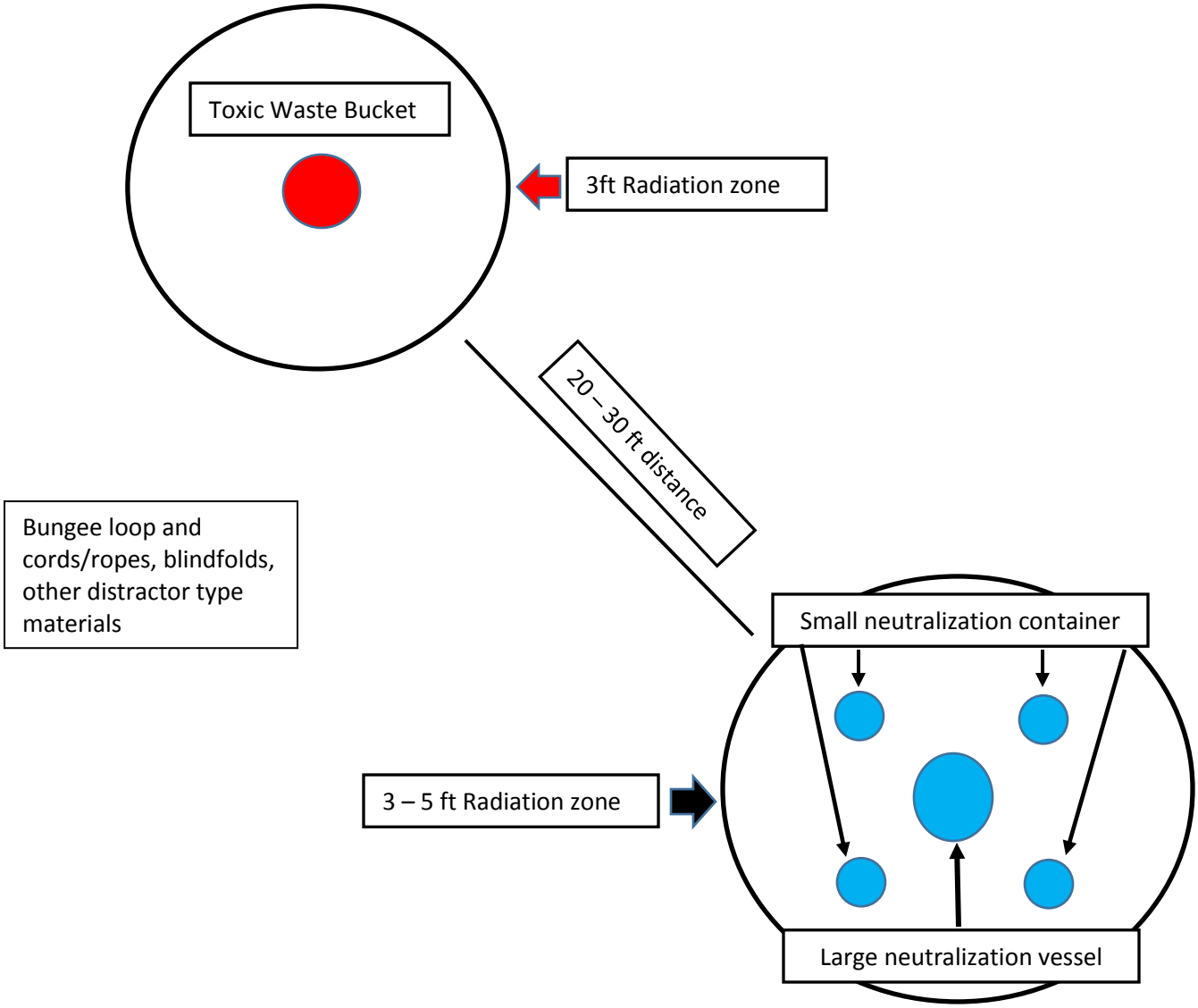
The scenario involves a simulated scenario where your team is tasked to neutralize toxic waste before it reaches critical mass and explodes causing tremendous damage to people and facilities.

Employ

Group Size: 4-6 people
Time: 40 - 50 minutes
Materials: : 2 x medium sized toxic waste receptacles (can be as simple as a coffee cans, mop buckets, empty paint cans, etc.…), 4 x smaller receptacles (solo cups, coffee cups, etc.…), 1 x rope to create a three foot circle for the radiation zone (can use tape on the floor as an alternative), 1 x bungee cord loop (ends are secured together to create the loop), 8 x bungee cords or 5' lengths of rope, simulated toxic waste (marbles, sand, water, rocks, golf balls, tennis balls, etc.…), Blindfolds (optional), Red herring objects (optional)

Setup: **Note** See illustration below to see how the scenario should be setup.
Use the rope/tape to create a three to four foot circle (or square) on the ground to represent the toxic waste radiation zone. The larger the radiation zone, the more difficult the activity. Place the bucket in the center of the radiation zone and fill it with the simulated toxic waste. Place the second "neutralization" bucket inside another three to five foot circle "radiation zone" approximately 20 to 30 feet away from the toxic waste bucket. The greater the distance, the more difficult the activity. Place the four smaller receptacles proximal to the empty "neutralization" bucket. Put all other equipment (i.e., bungee, cords, and red herring objects (optional) in a pile near the full toxic waste circle.

Illustration of Toxic Waste layout



Directions: The toxic waste has reached critical mass and will blow up causing significant damage if it is not neutralized. In order to neutralize it, the group must work out how to transfer the toxic waste from one bucket into the 4 small neutralization containers and finally into the larger container in order to "neutralize" the toxic waste. They will only be able to use the equipment provided and must not contaminate themselves by reaching into the radiation zone which extends all the way up through the ceiling. All of this must be accomplished within the established time frame set by the scenario controller. Anyone who ventures into the radiation zone will suffer injury and possibly even death, and spillage will create partial death and destruction. Therefore, the group should aim to accomplish this task without injury to any group members.

The circle represents the radiation zone emanating from the toxic waste in the bucket. Emphasize that

everyone must maintain a distance (circle radius) from the toxic waste wherever it goes, otherwise they will suffer severe injury, such as loss of a limb or even death. This includes reaching over the circle into the toxic waste "zone".
Give the group some planning time with no action e.g. 5 mins. Then start the clock and indicate it is time for action, e.g., 15 or 20 mins.

Exercise Controller Notes: Toxic Waste is a moderately difficult exercise and most groups will benefit from some coaching along the way.
The solution involves attaching the bungee cords to the bungee loop, then guiding the bungee loop around the bucket so as to "grab" the toxic waste bucket. Then with everyone pulling on their cord/rope and with good coordination and care, the toxic waste bucket can be lifted, moved and tipped into the empty neutralizing containers.
If someone breaches the toxic waste zone, indicated by the circle, enforce an appropriate penalty e.g., loss of limbs (hand behind back) or function (e.g., blindfolds if a head enters the zone) that lasts for the rest of the game. If a whole person enters the zone, they die and must then sit out for the rest of the activity.
If the group struggles to work out what to do, freeze the action and help them discuss.
If the group spills the waste entirely, make a big deal about catastrophic failure (everyone dies), invite them to discuss what went wrong and how they can do better, then refill the container and let them have another go.
Ideas for varying the level difficulty of the activity:
Adjust timeframe
Adjust distance between the buckets
Include obstacles between the buckets
Include red herring objects in available equipment

Processing Ideas: There are invariably plenty of key communications and decisions during the exercise that provide for fruitful debriefing.
The exercise will tend to naturally expose processes and issues related to many aspects of teamwork, including cooperation, communication, trust, empowerment, risk-taking, support, problem-solving, decision-making, and leadership.
Can be videoed for subsequent analysis and debriefing.
How successful was the group? e.g., consider:
How long did it take?
Was there any spillage?
Were there any injuries? (Often in the euphoria of finishing participants will overlook their errors and seem unconcerned about injuries and deaths caused by carelessness along the way. Make sure there is an objective evaluation of performance - it is rarely 'perfect'.)
How well did the group cope with this challenge? (e.g., out of 10?)
What was the initial reaction of the group?
What skills did it take for the group to be successful?
What would an outside observer have seen as the strengths and weaknesses of the group?
How did the group come up with its best ideas?
What did each group member learn about him/her self as a group member?
What lessons did the group learn from this exercise which could be applied to future situations?

Variations: Can be used as a staff selection or group assessment exercise. Can be used with large groups (with multiple kits and divided into small groups). The toxic waste bucket can be used upside

down, with a ball balanced on top. The activity can be framed in many different ways, e.g., instead of waste, it could presented as a desirable substance, such as a lifesaving serum which needs be carefully transported. Divide the group into leaders and workers. Leaders can talk but not touch equipment. Workers cannot talk but can touch equipment. For added drama, the toxic waste can be floated on a platform in a swimming pool. A chemical reaction can be created by putting baking soda in the neutralization container and vinegar in the toxic waste container. When combined, they froth.

One example of how the exercise can be run can be found at:
https://www.youtube.com/watch?v=KmDJj3iTU_M