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**SSERC Risk Assessment** (revised version March 2018)

(based on HSE’s INDG 163 ‘Risk assessment - A brief guide to controlling risks in the workplace’)

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| Activity assessed | Elephant’s Toothpaste |
| *Date of assessment* | 06/02/2018 |
| *Date of review (****Step 5****)* |  |
| *School* |  |
| *Department* |  |

| Step 1 | Step 2 | Step 3 | Step 4 | | |
| --- | --- | --- | --- | --- | --- |
| *List Significant hazards here:* | *Who might be harmed and how?* | *What are you already doing?*  *What further action is needed?* | *Actions* | | |
| *by whom?* | *Due date* | *Done* |
| 100 volume hydrogen peroxide is corrosive | Technician and teacher | Wear indirect vent goggles BS EN 1663  Wear nitrile gloves |  |  |  |
| Potassium/sodium iodide has no hazard | Technician, teacher | Avoid breathing in any dust  Wear indirect vent goggles BS EN 1663  Wear nitrile gloves |  |  |  |
| “toothpaste” – may still be corrosive – it depends how much unreacted peroxide remains. Treat with caution. | Technician, teacher and pupils by splashes | Wear indirect vent goggles BS EN 1663  Demonstrator to wear nitrile gloves |  |  |  |

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| **Description of activity:**  Using a good quality washing up liquid, food colouring, some potassium iodide and hydrogen peroxide to generate large volumes of bubbles forming a “toothpaste” foaming out of the measuring cylinder.  A faster reaction uses a saturated solution of sodium iodide. |

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| **Additional comments:**  Ensure the audience is at least 1 metre away from the demonstration area.  The reaction is exothermic and will generate heat.  Place the measuring cylinder in a basin large enough to contain the “toothpaste” as it will bleach surfaces and materials.  Once the hydrogen peroxide has been added stand well back. |