**Appendix A: Sample Risk Assessment – Bus Breakdown**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **HAZARD** | **LIKELIHOOD** | **SEVERITY** | **RISK RATING** | **RECOMMEDED CONTROLS** | **RISK RATING AFTER CONTROLS** |
| **VEHICLE/ PASSENGER COLLISION FOLLOWING BUS BREAKDOWN**  | Likely | Death or permanent disability | 1 | All bus drivers and maintenance staff trained in breakdown procedures based on the BIC/BAN Bus Breakdown Guide.Buses and repair vehicles carry breakdown and safety equipment including hi vis vests, warning triangles, traffic signs, and suitable communication device. Drivers instructed to pull over at location with good visibility of bus for the safety of other traffic.Drivers instructed to put hazard lights on and advise depot of any site hazardsDriver instructed to place warning triangles as per the guidelines behind the bus to warn traffic Drivers instructed to keep passengers on board the bus unless clear risk e.g., smoke or fire.Replacement bus to park in front of broken-down bus where possible.Bus driver and replacement driver to assist and account for all passengers to safely evacuate and board replacement bus.Replacement bus to wait for break in traffic before departing. | 6 |

**Risk Rating:**

1-2: High Risk (Action now)  3-4: Moderate (Action soon) 5-6: Low Risk (Action when practicable**)**

**Appendix B: Bus Operator Breakdown Communications Checklist**

|  |  |  |  |
| --- | --- | --- | --- |
|   **ITEM CHECKED  (PLEASE TICK)**   | **YES** | **NO** | **DETAILS** |
| **CONFIRM DRIVER AND BUS REGO** |    |    |    |
| **CONFIRM EXACT LOCATION** |    |    |    |
| **SINGLE OR DUAL LANES** |  |  |  |
| **CONFIRM SPEED LIMIT AT LOCATION**   |    |    |    |
| **CONFIRM PASSENGER NUMBERS**   |    |    |    |
| **ARE THERE ANY INJURIES**   |    |    |    |
| **ARE THERE ANY  ENVIRONMENTAL ISSUES**   |    |    |    |
| **ARE  EMERGENCY SERVICES REQUIRED**   |    |    |    |
| **IS FURTHER ASSISTANCE REQUIRED FOR TRAFFIC MANAGEMENT**   |    |    |    |
| **RECORD  TIME REPLACEMENT BUS SENT**   |    |    |    |
| **CONTACT DETAILS FOR ANY MARSHALS APPOINTED**   |    |    |    |
| **ANY PASSENGER SPECIAL NEEDS**   |    |    |    |
| **CONFIRM PASSENGER LOCATION AND TRANSFER POINT**   |    |    |    |
| **ARE FURTHER TRIPS / SERVICES AFFECTED**   |    |    |    |
| **DO SCHOOLS OR OTHER THIRD PARTIES NEED TO BE NOTIFIED**   |    |    |    |
| **REPORTING REQUIREMENTS COMPLETED**   |    |    |    |
| **BUS BREAKDOWN COMPLETED**   |    |    |    |

**Appendix C:Bus Driver Pre-Departure Checklist**

Most companies require drivers to conduct a visual pre- departure check of the vehicle prior to each shift. The checklist below provides a sample of the basic items that most operators would require drivers to check combined with other items for operators to consider adding to the vehicle to assist in the event of a breakdown.

|  |  |  |  |
| --- | --- | --- | --- |
|  **ITEM CHECKED (PLEASE TICK)**  | **YES** | **NO** | **COMMENTS** |
| **EMERGENCY BREAKDOWN CONTACT NUMBERS ARE SUPPLIED TO THE DRIVER OR LOCATED WITHIN THE VEHICLE.** |  |  |  |
| **WHEEL NUTS SECURE (VISUAL CHECK)**  |   |   |   |
| **CHECK ALL TYRES INFLATED** **AND NO SIGNIFICANT TREAD OR WALL DAMAGE TO TYRES.** |   |   |   |
| **NO BODY DAMAGE**  |   |   |   |
| **CHECK FOR ANY OBVIOUS LEAKS AND START BUS (CHECK ALL WARNING LIGHTS AND GAUGES)** |  |  |  |
| **START BUS (OIL/WATER/ BATTERY LIGHTS GO OFF**)  |   |   |   |
| **INDICATORS WORKING**  |   |   |   |
| **HAZARD LIGHTS WORKING**  |   |   |   |
| **TWO WAY RADIO WORKING**  |   |   |   |
| **MIRRORS UNDAMAGED AND IN POSITION**  |   |   |   |
| **CHECK GAUGES**  |   |   |   |
| **HI-VISIBILITY VEST ON BOARD**  |   |   |   |
| **SAFETY TRIANGLES ON BOARD (IF APPLICABLE)** |   |   |   |
| **MOBILE PHONE CARRIED (EMERGENCIES ONLY)**  |   |   |   |
| **WIG WAGS WORKING (IF APPLICABLE)**  |   |   |   |
| **TICKET MACHINE WORKING (IF APPLICABLE)**  |   |   |   |
| **AIR BAGS ARE UP BEFORE MOVING BUS** **(IF APPLICABLE)** |   |   |   |
| **GPS TRACKING WORKING (IF APPLICABLE)**  |   |   |   |

 **Appendix D:Bus Driver Breakdown Checklist**

|  |  |  |  |
| --- | --- | --- | --- |
|  **WHERE BUS IS STOPPED**  | **YES** | **NO** | **COMMENTS** |
| **AWAY FROM INTERSECTIONS, BENDS OR CORNER**  |   |   |   |
| **ON HARD ROAD OR SHOULDER SURFACE**  |   |   |   |
| **ON FLAT ROAD OR SHOULDER**  |   |   |   |
| **GOOD LINE OF SIGHT FOR ONCOMING TRAFFIC**  |   |   |   |
| **SUFFICIENT SPACE FOR BUS AND WORKSHOP VEHICLE**  |   |   |   |
| **CLEARANCE FROM OTHER TRAFFIC (3M IS IDEAL)**  |   |   |   |
| **SECURING THE BUS**  | **YES** | **NO** | **COMMENTS** |
| **BUS GEAR IN PARK OR NEUTRAL**  |   |   |   |
| **PARKING BRAKE APPLIED**  |   |   |   |
| **ENGINE TURNED OFF AND KEYS REMOVED FROM THE BUS**  |   |   |   |
| **HAZARD LIGHTS ON**  |   |   |   |
| **PASSENGERS ADVISED TO REMAIN ON BUS (UNLESS DANGER)**  |   |   |   |
| **HI-VIS VEST WORN**  |   |   |   |
| **DEPOT COMMUNICATION** | **YES** | **NO** | **COMMENTS** |
| **PROBLEM WITH BUS (IF KNOWN)**  |   |   |   |
| **LOCATION OF BUS**  |   |   |   |
| **SPEED LIMIT OF ROAD**  |   |   |   |
| **SINGLE LANE OR DUAL CARRIAGEWAY**  |   |   |   |
| **NO. OF PASSENGERS ON BOARD AND ANY SPECIAL NEED?**  |   |   |   |
| **PLACEMENT OF WARNING TRIANGLES** |
| **Roadway Separated by Fixed Median** | **Roadway Not Separated by Fixed Median** |
| **Under 80km/h** | **80km/h or over**  | **Under 80km/h** | **80km/h or over**  |
| **Beside Bus**  | **Beside bus**  | **Beside bus**  | **Beside bus**  |
| **100m behind bus**  | **200m behind bus**  | **100m behind bus**  | **200m behind bus**  |
| **50m behind bus** | **100m behind bus**  | **100m in front of bus**  | **200m in front of bus**  |
| **EVACUATION OF PASSENGERS (ONLY WHERE NECESSARY)** | **YES** | **NO** | **COMMENTS** |
| **INSTRUCTED TO EVACUATE IN ORDERLY MANNER** |  |  |  |
| **MARSHALLS APPOINTED FOR VULNERABLE PASSENGERS**  |   |   |   |
| **ESCORTED TO SAFE PLACE AWAY FROM BUS/TRAFFIC**  |   |   |   |

**Appendix E:** **Maintenance Staff Breakdown Checklist**

|  |  |  |  |
| --- | --- | --- | --- |
| **BEFORE LEAVING DEPOT**  | **YES** | **NO** | **COMMENTS** |
| **IS THE WORKSHOP BREAKDOWN VEHICLE EQUIPPED WITH THE CORRECT SAFETY DEVICES E.G., TRIANGLES, CONES, SAFETY SIGNS AND SPILL KIT**  |   |   |   |
| **ARE THE WARNING LIGHTS WORKING IN THE BREAKDOWN VEHICLE?**  |   |   |   |
| **IS THE TWO-WAY RADIO WORKING?** |   |   |   |
| **DO YOU HAVE A CHARGED MOBILE PHONE WITH YOU AND EMERGENCY CONTACT NUMBERS WITH YOU?** |   |   |   |
| **DO YOU HAVE THE CORRECT PPE WITH YOU E.G. HI VIS VEST AND SAFETY GLASSES?** |   |   |   |
| **ARE YOU AWARE OF THE LOCATION/SITUATION OF THE VEHICLE I.E., SPEED LIMIT, DIRECTION FACING?**  |   |   |   |
| **HAVE YOU PLANNED YOUR TRAVEL ROUTE TO THE BREAKDOWN LOCATION?**  |   |   |   |
| **AT THE BREAKDOWN LOCATION**  | **YES** | **NO** | **COMMENTS** |
| **DID YOU UNDERTAKE A SAFETY “DRIVE BY” PRIOR TO STOPPING?**  |   |   |   |
| **WHAT IS THE SPEED LIMIT OF THE ROAD YOU ARE WORKING ON? (PLEASE CIRCLE)**  | **40** | **50** | **60** | **70** | **80** | **90** | **100** | **110** |
| **WHERE IS THE SERVICE VEHICLE POSITIONED IN RELATION TO THE BROKEN-DOWN VEHICLE? (PLEASE CIRCLE)**  | **Rear** | **Front** |
| **IS THE SERVICE VEHICLE PARKED AT A 45-DEGREE ANGLE TO THE ROAD?**  |   |   |   |
| **HAS BUS DRIVER APPLIED PARK BRAKE, SELECTED PARK OR NEUTRAL AND SHUT DOWN ENGINE?**  |   |   |   |
| **HAVE YOU RECEIVED THE KEYS FROM THE DRIVER?** |  |  |  |
| **HAVE THE WARNING TRIANGLES, WARNING CONES AND HAZARD SIGNS BEEN PLACED CORRECTLY?** |  |  |  |
| **IS TRAFFIC ASSISTANCE REQUIRED TO ENSURE A SAFE WORKPLACE?**  |   |   |   |
| **IS A TOW TRUCK OR FLOAT REQUIRED?**  |   |   |   |
| **HAVE YOU CREATED A SAFE WORK ZONE I.E., 3METRES FROM PASSING TRAFFIC AND 10 METRES BUFFER ZONE FROM BUS?**  |   |   |   |
| **AFTER THE BREAKDOWN**  | **YES** | **NO** | **COMMENTS** |
| **ARE THERE ANY ENVIRONMENTAL HAZARDS TO REMEDIATE?** |  |  |  |
| **IS THE BREAKDOWN LOCATION FREE OF RUBBISH AND DEBRIS?**  |   |   |   |
| **DID YOU COMMUNICATE WITH THE DEPOT THAT THE VEHICLE REPAIR WAS COMPLETED?**  |   |   |   |