**Stormwater Drain Pits**

May 2013

**Issue/Incidents:**

Due to poorly maintained drain pits there have been a number of incidents including:

* Two unrelated falls into open drain pits causing bruising on arms and shoulders and broken ribs
* A Sprained ankle resulting from tripping on a piece of wood covering the end of a drain.
* A cut above left eye and grazed knees resulting from tripping and falling on a metal drainage grate.
* Twisted ankle after stepping on an open drain pit.
* Jarred elbow when supporting a student who slipped on a drain pit cover.

**Factors/Risks to Consider**

* The removal of drain pit covers created a falling hazard.
* Recessed, raised and damaged/broken drain pit covers created an uneven surface increasing the risk of slips, trips and falls.
* Missing paving bricks and loose grate covers created a tripping and falling hazard.

**Recommendations:**

* Identify all drain pits and covers on site, include these in the workplace’s [OHS Risk Register](http://www.eduweb.vic.gov.au/edulibrary/public/ohs/DEE_EHU_4-2-4_Risk_Register.xls) and document current controls.
* Ensure that drain pits are included in the [Workplace Inspection Checklist](http://www.eduweb.vic.gov.au/edulibrary/public/ohs/DEE_EHU-20-2-1_Workplace_Inspection_Checklists.xls) and regularly inspected for rust, cracks and damage.
* Ensure drain pit covers/grates are secured using a tight fitted bolt design as specified in the [DEECD Building Quality Standards Handbook](https://edugate.eduweb.vic.gov.au/sc/sites/Infonline/Policies%20Guidelines%20and%20Procedures/Building%20Quality%20Standards%20Handbook%20(Oct%202011).pdf)*.*
* Ensure raised or sunken drain pit covers are re-fitted so they sit at ground level. In the short-term, raised drain pit covers should be highlighted using high visibility paint.
* Replace rusted or damaged steel grates with ‘checkered-type’ or flat ‘steel-type’ covers (Refer to Photos 5 & 6).
* Where practicable reconfigure footpaths and walkways to avoid pedestrian traffic near or over drain pits.
* Ensure employees wear appropriate footwear particularly when on yard duty.

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| Photo 1: Unreinforced concrete cover with visible cracks from underneath |  | Photo 2: Significant cracks of unreinforced concrete cover |

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| Photo 3: Secured metal grate |  | Photo 4: Bolted metal grate |

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| Photo 5: Flat steel-type drain pit cover |  | Photo 6: Checkered-type drain pit cover |

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| Photo 7: Typical stormwater drain pit on kerbside with concrete cover – no evidence of cracking from outside |  | Photo 8: Typical stormwater drain pit with concrete cover – no evidence of cracking from outside |

**Further Information:**

Further information can be obtained from DEECD’s [Health, Safety and WorkSafe](http://www.education.vic.gov.au/school/principals/governance/Pages/healthworksafe.aspx) website or by contacting the DEECD OHS Advisory Service on **1300 074 715** or email[**safety@edumail.vic.gov.au**](mailto:safety@edumail.vic.gov.au) **.**