

## SAFETY ALERT

### REVERCHON LOG FLUME

On 27 August 2011 an accident happened on a Reverchon Log Flume ride. It resulted in a number of serious lacerations to the legs of a 4 year old girl and her 58 year old aunt. Some of the injuries will require plastic surgery/grafting.

The ride was manufactured in 1998 and its DOC was in date. A general view from the top of the ride is at Fig 1.

**Fig 1.**



Investigations so far have not identified any mechanical or control system defects that would have directly caused the accident. It is stressed however that the investigation is ongoing and further details will be released as known. As investigators are being assisted by other such ride owners, no inferences should be drawn as to accident causation from the information in this Alert.

The machine has two lifts and two drops, the second being the biggest and the accident occurred at the water tank at the bottom of the second drop. See Fig 2.

**Fig 2.**



Initial investigations suggest that the passenger unit (log) involved was released following a temporary halt for technical reasons, and then failed to slow down to a safe residual speed in the water tank. This resulted in the passengers being ejected from the log.

The water level in the tank is a critical safety feature of the ride as it forms the only brake for the logs. If the water level is too low the log will not be slowed such that it can safely negotiate the following bend. If the water level is too high the log will be slowed more violently which can cause whiplash type injuries to riders.

Controllers should ensure that they have measures in place to ensure that the water in the tanks at the bottom of the drops is at a steady, correct depth before logs are allowed to run. The efficiency of electronic depth probes, the water conditions under which they will permit the ride to operate and their ability to stop the ride in fault conditions should be checked and verified.

Further information if required from M Sandell (HSE) on 07527002689.

**M Sandell**  
**HM Inspector of H&S**