Principal criteria	Excellent (1)	Good (2)	Fair (3)	Poor (4)
Scientific Significance: Does the manuscript represent a substantial contribution to the understanding of natural hazards and their consequences (new concepts, ideas, methods, or data)?			The case described is of considerable interest, because of its societal impact and because it shows that the event is caused by the violation of disposal regulations. It will serve to strengthen the awareness that strict following of design regulations is absolutely necessary. It is not bringing new concepts or ideas.	
Scientific Quality: Are the scientific and/or technical approaches and the applied methods valid? Are the results discussed in an appropriate and balanced way (clarity of concepts and discussion, consideration of related work, including appropriate references)?			The use of the terminology: "flow-slide" is confusing. All observations seem to prove that liquefaction was the primary process, followed by progressive backward mobilisation of the dumped mass due to loss of toe support. A sliding plane has not been detected. What is the value of the numerical analysis as presented in chapter 7 in this case?	
Presentation Quality: Are the scientific data, results and conclusions presented in a clear, concise, and well-structured way (number and quality of figures/tables, appropriate use of technical and English language, simplicity of the language)?			The data, results and conclusions are presented in a reasonable way. The number of figures however could be reduced without loss of content of the paper. The English should be reviewed by a native speaker with geotechnical knowledge and experience.	

Access review, peer review, and interactive public discussion (NHESSD)

Manuscripts submitted to NHESS at first undergo a rapid access review by the editor (initial manuscript evaluation), which is not meant to be a full scientific review but to identify and sort out manuscripts with obvious deficiencies in view of the above principal evaluation criteria. Since a NHESSD paper will be publicly accessible on the web, it should meet general criteria of readability. It should be well-written, well-referenced and well-structured. Figures and tables should be in good shape and referred to accordingly. In addition, the paper should contribute something new and interesting to the community.

If they are not immediately rejected, they will be published on the Natural Hazards and Earth System Sciences Discussions (NHESSD) website, the discussion forum of NHESS, where they are subject to full peer review and interactive public discussion.

In the full review and interactive discussion the referees and other interested members of the scientific and technical communities are asked to take into account all of the following aspects:

- Does the paper address relevant scientific and/or technical questions within the scope of NHESS? Yes
- 2. Does the paper present new data and/or novel concepts, ideas, tools, methods or results?
- 3. Are these up to international standards? The methods and data are presented according to international standards
- 4. Are the scientific methods and assumptions valid and outlined clearly? Terminology flowslide is confusing. All observations seem to prove that liquefaction was the primary process, followed by progressive backward mobilisation of the dumped mass due to loss of toe support. A sliding plane has not been detected.
- 5. Are the results sufficient to support the interpretations and the conclusions? The concept of liquefaction as main cause should be discussed in more depth.
- 6. Does the author reach substantial conclusions? Yes
- 7. Is the description of the data used, the methods used, the experiments and calculations made, and the results obtained sufficiently complete and accurate to allow their reproduction by fellow scientists (traceability of results)? Yes
- 8. Does the title clearly and unambiguously reflect the contents of the paper? Yes
- 9. Does the abstract provide a concise, complete and unambiguous summary of the work done and the results obtained? Yes
- 10. Are the title and the abstract pertinent, and easy to understand to a wide and diversified audience? Yes, but review of the English is necessary
- 11. Are mathematical formulae, symbols, abbreviations and units correctly defined and used? If the formulae, symbols or abbreviations are numerous, are there tables or appendixes listing them? The accuracy of the data is in many cases a calculation accuracy rather than a real accuracy (see for instance lines 284 300). The whole paper should be reviewed to correct for this.
- 12. Is the size, quality and readability of each figure adequate to the type and quantity of data presented? Some of the figures are not essential and can be removed (2, 3b, 3c, 3d, 7a, 7c, 7d, 7e, 10a, 10b, 15 or 16, 17a, 17c, 17d, 19a, 19c, 20, 22a, 22b, 22c) some others (7b, 7f, 17b, 19b, 19d, 22d) could be presented at a larger scale to be useful.
- 13. Does the author give proper credit to previous and/or related work, and does he/she indicate clearly his/her own contribution? Yes
- 14. Are the number and quality of the references appropriate? Can probably be reduced when concentrating on their relevance (see also item 18)
- 15. Are the references accessible by fellow scientists? Yes, only few are in Chinese
- 16. Is the overall presentation well structured, clear and easy to understand by a wide and general audience? Some rearrangement of chapters would be useful. See also item 18.
- 17. Is the length of the paper adequate, too long or too short? Length of text is appropriate, number of figures can be reduced.
- 18. Is there any part of the paper (title, abstract, main text, formulae, symbols, figures and their captions, tables, list of references, appendixes) that needs to be clarified, reduced, added, combined, or eliminated? In the <u>introduction</u> mention is made of a large number of waste disposal site accidents, but from the title of the references it seems that in many

cases these accidents have happened in municipal waste dump sites instead of dump sites with construction waste material consisting of silty soil, clay, rock, and gravel which is the case in this paper. The references concerning municipal waste dumps are better removed from the paper. Furthermore in the introduction references to the Hongao dumpsite should be treated separately and not mixed through the references on other dump sites. Chapters 3 and 4 are better placed in the introduction or at least before the chapter on Methodology. The introduction should preferably conclude with some general conclusions derived from earlier publications on construction waste dump sites and a list of still open questions which remain to be solved by the research. The introduction should be followed by a special chapter on methodology in which is described which data had to be collected and which methods of analysis were used to solve the research questions defined in the introduction. This chapter can then be followed by chapters on data collected and on results and conclusions The list of references seems to be unnecessary long, only such papers should be referenced that are used for the solution of the problem, not to show how many papers one has read but were not used. This is a research paper, not a bibliography. Chapters 5.3 and 7 can probably better be taken out completely.

- 19. Is the technical language precise and understandable by fellow scientists? After a thorough review by a native English speaker with geotechnical background knowledge this should not be problem
- 20. Is the English language of good quality, fluent, simple and easy to read and understand by a wide and diversified audience? English can be understood, but should be revised by native speaker to improve its quality
- 21. Is the amount and quality of supplementary material (if any) appropriate? No supplementary material.

Peer-review completion (NHESS)