Summary of Dr. G. Fred Lee Professional Publication Record June 15, 2012

I was recently informed that a Waste Management staff member stated at a public meeting in Alberta, Canada that I have not published peer-reviewed papers on landfill issues. That claim was made in an attempt to discredit the technical content of my reports that concluded that the proposed Waste Management, Inc. Thorhild landfill will ultimately fail to protect groundwater and surface water quality from pollution by landfill leachate for as long as the MSW wastes proposed for deposition in that landfill will be a threat to the environment and the public health and welfare of those within the sphere of influence of the proposed landfill. First, it is important to note that that rather than address the technical substance of my findings, Waste Management personnel sidestepped the technical critique and attempted to redirect the focus onto my history of technical publication. Second, in doing so, the Waste Management representative demonstrated the paucity of his familiarity not only with my background and publications, but also with the technical literature in this field.

While my history of technical publication does not change the reality of the significant technical deficiencies of the proposed landfill for protecting public health and environmental quality, it behooves me to set the record straight concerning my publication record. As shown in my resume, I have developed more than 1,184 professional papers and reports on issues and projects in which I have been active over my five-decade-long professional career in the sources, significance, fate, and control of chemical contaminants as they may impact beneficial uses of surface and groundwater quality and public health/welfare. Many of those papers and reports are available as downloadable files from Dr. Jones-Lee's and my website, <u>www.gfredlee.com</u>. Included in that total are 487 papers that have received formal peer review or professional review of technical content; about 50 of those papers that have received such review have been devoted to landfilling issues.

In addition to my formally peer/professionally-reviewed papers, I have authored another 647 reports, of which about 100 have been devoted to issues of landfill impacts and protection of public health/welfare and environmental quality from such impacts. Those reports include reports on findings of research projects I have undertaken; those project reports were extensively peer-reviewed by the funding agencies' staffs and their invited peer-reviewers for the studies. Other reports consisted of comments I submitted to regulatory agencies concerning existing and proposed regulations, comments on which I had solicited technical review by professional colleagues.

Another group of our reports is comprised of extensive discussions of landfill issues; those reports contain discussion of, and references to, the landfill literature including peer-reviewed papers by other professionals on the issues of concern. One report in particular, our so-called "Flawed Technology" review, provides an in-depth review of information and findings from the technical literature and professionals in the field concerning aspects and provisions of the US EPA Subtitle D MSW landfilling regulations relative to their adequacy and reliability for providing true protection of public health/welfare and environmental quality within the sphere of influence of the landfill for as long as the disposed wastes are a threat. That more than 50-page discussion contains about 100 references to the professional literature. As with our "Flawed

Technology" review, many of our reviews are of greater length and depth than those typically published in the peer-review journal. Among our overview reports are:

Lee, G. F., and Jones-Lee, A., "Flawed Technology of Subtitle D Landfilling of Municipal Solid Waste," Report of G. Fred Lee & Associates, El Macero, CA, December (2004). Updated July (2011).

http://www.gfredlee.com/Landfills/SubtitleDFlawedTechnPap.pdf

Editor, MSW Management, "New Landfill Impact Paper with Emphasis on Post Closure Issues and Landfill Development Checklist," Online in Editorial Tab, MSW Management, "The Latest," http://www.mswmanagement.com/MSW/Articles/17258.aspx May 9 (2012). http://www.gfredlee.com/Landfills/MSW_Mgt_EditorBlog.pdf

Lee, G. F., and Jones-Lee, A., "Review of Potential Impacts of Landfills & Associated Postclosure Cost Issues," Report of G. Fred Lee & Associates, El Macero, CA, April (2012). http://www.gfredlee.com/Landfills/Postclosure_Cost_Issues.pdf

In addition to my extensive record of publishing in peer-reviewed publications, I have served as a member of the editorial boards of several environmental journals including *Environmental Science and Technology, Groundwater, Stormwater, Remediation,* and *Environmental Toxicology and Chemistry*. As a member of those editorial boards, it was my responsibility to peer-review papers proposed for publication in the journal. Rarely does a month pass in which I am not asked by an editor of a national/international journal to peer-review a proposed paper or report that has been submitted for publication. Recently, at the request of the US EPA, I served on two peer-review panels for research projects proposed for US EPA funding in areas of water quality management.

For two decades I served as an American Chemical Society tour speaker, in which capacity I was invited to address various ACS chapters throughout the US concerning landfills and their potential problems. At the invitations of a variety of professional groups including the National Groundwater Association, American Water Resources Association, several University of California extensions, and the American Society of Civil Engineers, I presented numerous one-day to several-day short-courses on MSW landfilling issues and problems. Those presentations received substantial peer-review.

For about 20 years, I served as Chief Examiner for the American Academy of Environmental Engineers (AAEE) in New Jersey and in California, in which capacity I sat in review of the qualifications of professional civil engineers to attain AAEE-certification as professionals in solid waste management.

While I strongly support having papers and reports properly peer-reviewed prior to publication, I also fully understand that going through a peer-review process does not ensure that published papers on all topics are, in fact, technically strong or reliable. Indeed, in my more than 50 years of work on more than 80 landfills, I have found that some papers that are cited by landfill applicants and their consultants do not provide full disclosure of potential longterm impacts of a proposed landfill. In order to address this well-recognized problem, a member of the Ethics

Committee of the American Society of Civil Engineers asked me to provide a discussion of this issue, which was published as:

Lee, G. F., and Jones-Lee, A., "Practical Environmental Ethics: Is There an Obligation to Tell the Whole Truth?" Published in condensed form as "Environmental Ethics: The Whole Truth," Civil Engineering, Forum, 65:6 (1995). http://www.gfredlee.com/Landfills/ethics.htm

Further information on my professional background, expertise, and experience can be found in my resume and on our website.

It is not surprising that Waste Management would be making disparaging, off-the-cuff – though both untrue and tangential to the issues – statements in an effort to try to discredit my technical review of the proposed Thorhild landfill. Not only do I have a strong and extensive history of peer-reviewed publications on landfill impact issues, but also the technical credibility of my comments on the potential impacts of the Thorhild Landfill on public health and the environment cannot be impugned.