

Comments on

“Imperial County Planning and Development Services
Agreement for Conditional Use Permit (CUP) #07-0027 for a Class III (Non-Hazardous) Solid
Waste Landfill (Imperial Landfill)
Conditional Use Permit #07-0027
Planning & Development Services Department (07/30/10)
‘(Final CUP)’”

Comments submitted by
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On June 24, 2010 I submitted a report entitled, “Review of the Potential Adverse Impacts of the Proposed Expansion of the Allied Imperial Landfill,” in which I discussed significant threats that the proposed Allied Imperial Landfill represents to public health, groundwater resources, and the environment. My report and PowerPoint slides that summarize my report are available at:

Lee, G. F., “Review of the Potential Adverse Impacts of the Proposed Expansion of the Allied Imperial Landfill,” Report for McFarland FLA, for presentation to Imperial County Board of Supervisors at June 29, 2010 Board hearing on Allied Imperial Landfill expansion, G. Fred Lee & Associates, El Macero, CA, June 24 (2010).
http://www.gfredlee.com/Landfills/Allied_LF_exp_rpt.pdf

Lee, G. F., “Review of the Potential Adverse Impacts of the Proposed Expansion of the Allied Imperial Landfill,” PowerPoint slides for presentation to Imperial County Board of Supervisors at June 29, 2010 Board hearing on Allied Imperial Landfill expansion, G. Fred Lee & Associates, El Macero, CA, June 24 (2010).
http://www.gfredlee.com/Landfills/Allied_LF_exp_sli.pdf

ICF, the contract firm that developed the EIR for the proposed expansion of the Allied Imperial Landfill Expansion, challenged aspects of my report in a July 29, 2010 document, which I was provided on August 15, 2010, and refuted (copy of my August 15 comments is attached).

A specific issue with respect to the CUP is the following challenge offered by ICF:

“ Issue 1: Dr. Lee's comments focus on the Initial Study and the Draft EIR. They do not account for additional analysis in the FEIR or post-FEIR CUP (P. 1).”

That statement is more of the unreliable and distorted information that ICF provided on my report. As discussed in my report cited above, I did review the FEIR and did provide detailed comments on the draft CUP prepared by the County staff that was available at the time of preparation of my report. The Final CUP, made available to me this morning, carries a date of July 30, 2010. Obviously, I could not comment on deficiencies in this Final Cup in my June 24, 2010 report.

My June 24, 2010 report provided information on several of the highly significant deficiencies in the County Planning and Development Services staff’s draft CUP with regard to its provisions

for development, operation, closure, and postclosure care of the proposed Allied Imperial Landfill expansion for the protection of public health, water resources, and the interests and well-being of those who own and use property within several miles of the proposed landfill expansion. It was obvious to me that the County staff in developing the draft CUP was either not aware of, or simply ignored, the vast professional literature and experience concerning the impacts of MSW landfills of the type that Allied has proposed for its landfill expansion.

If the Final Cup had been available at the time of preparation of my June 24, 2010 report, I would have provided the following comments on it. Since the highly inaccurate, unreliable and distorted comments of ICF are in the Board of Supervisors' review of the proposed Allied Imperial Landfill expansion, I REQUEST THAT MY AUGUST 15, 2010 AND THESE COMMENTS BE INCLUDED IN THE ADMINISTRATIVE RECORD FOR THE BOARD'S REVIEW OF THE MATTER.

The final CUP states,

“1.1.2 The Landfill will be constructed and operated to meet or exceed all federal, state, and county standards regarding design, construction, and operation of a landfill. These include requirements for lining the landfill before the placement of MSW and installation of systems for collection, recovery, monitoring, and treatment of landfill gas and leachate that may be produced during the life of the project. Closure procedures and post-closure monitoring and funding and financial assurances will be provided pursuant to Condition 1-8, et seq. herein.”

The public health and environmental quality protection afforded by this proposed expansion relies on the adequacy of meeting or exceeding *“all federal, state, and county standards regarding design, construction, and operation of a landfill”* to ensure this protection. As discussed in my *“Flawed Technology”* technical review referenced in my report,

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 June (2010).

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

meeting, and even *“exceeding”* the minimum citing, design, operation, closure and postclosure requirements of the federal US EPA Subtitle D and state of California regulations does not ensure that a landfill will be protective of public health, groundwater resources, and the interests and well-being of those who own or use lands within several miles of a MSW landfill of the type that Allied proposes to develop in its landfill expansion.

The final CUP states,

“1.8.1 These plans shall include environmental monitoring and control systems, as well as funding for the closure and post-closure activities in accordance with the approved Site Closure and Post-Closure Plans. In addition, Permittee shall establish a corrective action surety pursuant to Condition 1.8.5, herein, which shall be maintained by an independent third party approved by the Director of Planning & Development Services Department in consultation with Permittee, from which withdrawals for corrective action in the event of environmental impairment in accordance with Condition 1.16 not otherwise corrected by Permittee, shall be made as authorized by the responsible public agencies named in Condition 1.7 of this Conditional Use Permit.”

As discussed both in my report and in my August 15, 2010 comments, such a condition is highly superficial since Allied will not likely be in business for the hundreds of years or more that the wastes in the proposed landfill expansion will be a threat. The County should clearly recognize this reality and be prepared to fund postclosure monitoring, maintenance, and remediation that will inevitably be needed after Allied is no longer in business.

The final Cup states,

“1.8.3 Permittee shall close, maintain, and monitor the landfill cells as operating phases are completed. These closure and post-closure activities shall be conducted in accordance with federal and state laws regarding landfill closure. Activities will include, but not be limited to: drainage control; slope and surface stabilization; leachate collection and treatment; landfill gas (LFG) management and control; and erosion control.”

and

“1.8.4 Permittee shall provide financial assurances for landfill closure, post-closure maintenance, and corrective action in accordance with all applicable local, State, and Federal laws, rules, regulations and ordinances, including the Code of Federal Regulations (40 CFR Subpart G, Financial Assurance Criteria) and this CUP. These financial assurances shall include written cost estimates for landfill closure, post-closure care, and corrective action. These estimates and the required financial assurances shall be updated not less than every five (5) years. Copies of all estimates and financial assurances, including revised estimates and assurances, and a summary of all changes approved by the LEA/CALRECYCLE and RWQCB after each 5-year review, shall be provided to the County Planning & Development Services Department for review and comment. County maintains the right to impose equivalent requirements if/when CFR requirements change.”

To those unfamiliar with the real world of postclosure care of a closed MSW landfill developed by a private landfill company, these conditions might appear to provide sound assurance of the Allied’s financial responsibility for the necessary monitoring, maintenance, and appropriate remediation of the inevitable problems caused by the proposed landfill expansion for as long as the wastes pose a threat. However, in practice such assurance obviously cannot be provided under the current postclosure funding requirements of the US EPA and the state of California; there can be no reasonable expectation that Allied will be in business and able to bear the substantial costs for these activities for as long as the wastes in this proposed landfill expansion will be a threat to public health and the environment.

The County Board of Supervisors should recognize this reality and clearly acknowledge to the public, before the expansion is allowed, that the County will become responsible for providing postclosure funding for as long as the wastes in the landfill will be a threat for the hundreds of years that will occur after Allied is no longer in business.

Final Cup states,

“2.1.5 Layout and detail of the liner and leachate collection system as prepared by a California-licensed engineer shall be submitted by Permittee for approval by the following agencies as required by the applicable permit: Planning & Development Services Department; LEA; RWQCB; and CALRECYCLE. Following approval by such agencies, the liner and leachate collection system shall be incorporated into the Site Development Plan.”

and

“Water Resources

2.2.5 A composite liner, composed of HDPE flexible geomembrane a minimum thickness of 60 mils (or other technologically superior liner) placed over two feet of soil with a maximum permeability of .0000001 centimeters per second, shall be installed below all refuse deposits in the western fill area. A protective geotextile filter fabric shall be placed above the flexible geomembrane liner.”

While these conditions provide an illusion of public health and environmental quality protection, they do not reflect what is well-recognized in the professional literature and practice with regard to landfill systems (see discussion in the Flawed Technology review). It is well-known that meeting the regulatory agencies’ prescriptive requirements for landfill design is inadequate to ensure protection of public health and the environment for as long as the wastes in the landfill will be a threat. The single composite liner will deteriorate over time and fail to collect all leachate that can develop in the landfill thereby leading to groundwater pollution by landfill leachate. The functioning of the leachate collection system depends on the integrity of the liner buried beneath the waste, and is subject to plugging.

The truth of the matter of the adequacy of regulatory landfill design requirements is that the landfill design regulations were developed by the US EPA as part of a litigation settlement and were acknowledged by the US EPA that they are not protective of public health and environmental quality for as long as the wastes pose a threat. While this situation has been well-known for more than two decades, the US EPA and some states including California have not corrected this deficiency. In fact, there are about a dozen states in the US that will not allow the development of a landfill of the type that Allied proposes to develop because of these problems.

The final CUP states,

“2.2.12 A landfill gas (LFG) collection system shall be installed as landfill operations progress and will consist of vertical wells installed in the landfill in order to capture the methane migrating along the underside of the cover. These gas collection trenches will route the gas collected from the eight (8) planned phases of the landfill expansion to uniformly spaced, passive gas vents to be included in the LFG monitoring network. Through the monitoring of the production of LFG, the need to flare or collect landfill gas shall be evaluated and determined by APCD, RWQCB, and LEA/CALRECYCLE.”

Again, those who understand the long-term threat that dry-tomb landfills of the type that Allied proposes to develop in its landfill expansion, know that meeting these types of requirements for landfill gas releases control will not prevent the escape of landfill gas and associated hazardous components, some of which are carcinogens, during the active life of the landfill or throughout the hundreds of years that the landfill will be a threat to generate landfill gas. Because of the dry-tomb-type landfill and the deposition of some of the MSW in plastic bags, the period of landfill gas generation will be extended for many decades, well-beyond when Allied will be expected to be in business to provide postclosure funding to operate and maintain the gas collection system. Further, without adequate landfill-owned buffer lands between where wastes will be deposited and adjacent property lines there will be trespass of landfill gas components

onto adjacent properties where they will pose a threat to the health and welfare of the adjacent property owners and land users.

The final CUP states,

“3.2.6 Final landfill cover shall be constructed in accordance with the EPA, Subtitle D, RCRA Regulations and shall consist of a minimum 2-foot-thick compacted soil foundation layer, a minimum 18-inch soil layer with a maximum permeability of .0000001 centimeters per second, and a minimum 1-foot-thick vegetative (erosion) cover or design which is agreed to be technologically equivalent or superior. The final grade shall have a minimum of a 3% slope.”

Again, it is well-known that a landfill cover of this type will not prevent water from entering a landfill and generating leachate that can pollute groundwater as the liner system eventually and inevitably fails. It also will not prevent moisture/water from entering the wastes and generating landfill gas that can escape from the landfill and be a threat to the health of those on adjacent properties. These issues are discussed in detail in the “Flawed Technology” review.

Final CUP states,

“3.2.8 Groundwater monitoring and any corrective actions on groundwater contamination, gas collection and control, and maintenance of landscaping and drainage shall be continued for 30 years, or as additionally required by state or federal regulations after final closure, with a certified availability of funds for the above post- closure activities defined prior to initiation of each discrete landfill unit.”

It is totally inappropriate and naïve to even suggest that the postclosure period could be only 30 years. As quoted in the “Flawed Technology” review, many experts, including a former director and the current director of the Solid Waste Authority of North America (SWANA), as well as a recent SWANA report, have all concluded that 30 years is a very small part of the period during which postclosure landfill monitoring, maintenance, and groundwater remediation will be required for today’s MSW landfills. SWANA represents the owners of public landfills across the US. While private landfill owners such as Allied attempt to deny and dismiss the long-term threats that today’s dry-tomb-type landfills represent, the organization representing owners of public landfills recognize the absurdity of prescribing a 30-year postclosure period and are working toward addressing the need for postclosure funding well-beyond 30 years.

Issues of the long-term potential for a proposed MSW landfill to be a threat to public health and the environment are discussed in my Flawed Technology report. The County Board of Supervisors should understand that these flaws are not debatable or reflective of a mere difference of opinion among experts. It, and the public that it represents, should understand the long-term public health, environmental quality, and financial implications associated with permitting of a dry-tomb-type landfill such as the proposed Allied Imperial Landfill expansion, even in accord with current regulations, especially without several miles of landfill-owner owned buffer lands between where wastes will be deposited and adjacent property owners property lines.

Question on these comments can be directed to Dr. G. Fred Lee at 530 753-9630 or gfredlee@aol.com.