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LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT®

City of St. Louis Airport Authority

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Francis G. Slay
Mayor
City of St. Louis

September 20, 2010

Mr. Daniel Gravatt
Project Manager/Environmental Scientist
U.S. EPA – Region 7
901 North 5th Street
Kansas City, Kansas 66101

Re: West Lake Landfill: Comments on Work Plan for Supplemental Feasibility Study

Dear Mr. Gravatt:

As requested, the City of St. Louis (“the City”), the owner and operator of Lambert-St. Louis International Airport® (“Airport”) has reviewed the June 4, 2010 Work Plan for Supplemental Feasibility Study Radiological-Impacted Material Excavation Alternatives Analysis: West Lake Landfill Operable Unit-1 (“Work Plan”). The City supports the Environmental Protection Agency’s (“EPA”) evaluation of remedial alternatives to address radiologically contaminated materials located at the West Lake Landfill (formerly known as the Bridgeton Landfill). The City takes seriously the presence of radioactive materials at the West Lake Landfill and the long term impact those radioactive materials may have on water resources. The City urges EPA to select a remedy for the cleanup of the West Lake Landfill radioactive wastes that is practical and ensures that these wastes no longer pose a threat to human health and the environment. However, the City must ensure that any action involving the West Lake Landfill does not unnecessarily jeopardize the City’s public safety obligations with respect to Airport and its operations.

The Federal Aviation Administration (“FAA”) and United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (“USDA”) previously determined that the West Lake Landfill was a hazardous wildlife attractant for the Airport. *See* June 2004 Lambert – St. Louis International Airport Wildlife Hazard Assessment for the Bridgeton Sanitary Landfill. The West Lake Landfill is located, at its closest point, within approximately 9,166 feet of Airport Runway 11/29 (formerly 12W/30W), which is inconsistent with FAA runway siting guideline requiring a 10,000 foot separation radius. *See* FAA Advisory Circular 150/5200 33B (Hazardous Wildlife Attractants on or near Airports). The FAA, in a September 1998 Record of

Decision (“1998 FAA ROD”) concerning expanded operations at the Airport, directed the City to mitigate the West Lake Landfill to protect aircraft from bird strikes at the Airport. See September 30, 1998 FAA Record of Decision: Lambert-St. Louis International Airport, pg. 42 - 43. Pursuant to the requirements of the 1998 FAA ROD, the City entered into the Negative Easement Agreement (“NEA”) with the Bridgeton Landfill operators, at significant cost, to prohibit depositing or dumping of new or additional putrescible waste on the entirety of the property after August 1, 2005, and to require the landfill operators to comply with laws and regulations concerning proper landfill cover, so as to reduce or mitigate wildlife hazards to aircraft and airport facilities. See Negative Easement Agreement at pg. 2 – 3. The restrictive covenants in the NEA for the Bridgeton Landfill, along with other FAA required programs, have successfully mitigated aircraft bird strikes at the Airport, and particularly runway 11/29 (formerly 12W/30W). See Lambert St. Louis International Airport 2005 – 2010 Bird Strike Report Summary. Although these FAA restrictions and requirements may be mentioned as guidance in the feasibility study undertaken at the insistence of EPA, we are informed that these restrictions should be considered applicable or relevant and appropriate requirements for remedy selection purposes.

After consultation with Airport engineers and USDA Wildlife Services staff, the City believes that the excavation alternatives described in the Work Plan would adversely affect wildlife mitigation measures taken by the Airport to protect aircraft from bird strikes; thereby placing the City in violation of the 1998 FAA ROD requiring that such mitigation efforts be undertaken and maintained. In addition, such action on the part of the former landfill operators would violate the NEA. The primary issue here is aircraft and passenger safety. Bird studies conducted by the USDA have identified 11 of the top 15 most hazardous bird species to aircraft (damage and effect on flight) at the West Lake Landfill and surrounding areas. Many of these bird species, which include vultures, geese, hawks, gulls, owls and pigeons, have been reported in the approximately 600+ bird strike incidents that have occurred at the Airport since the 1990s. The USDA Wildlife Service has advised the City that uncovered radiologically impacted municipal waste at the West Lake Landfill will serve as a food attractant for a variety of bird species and increase the risk of bird/aircraft strikes at the Airport. See September 17, 2010 USDA letter to the Airport.

The Work Plan contemplates that municipal waste in the landfill will be removed by excavation and disposed on the property during the creation of the on-site engineered disposal cell, in direct violation of Paragraph 1 of the NEA. Further, the radioactive municipal waste materials will remain exposed at the site throughout the duration of excavation and landfill activities without a daily cover, which is in violation of Missouri Solid Waste Regulation 10 CSR 80-3 (17)(C)(1) and Paragraph 2 of the NEA. Moreover, based on anticipated waste volumes and available funding, the response action contemplated in the Work Plan would, rationally speaking, appear to be a ten to twenty year effort. The FAA considers any facility handling uncovered quantities of municipal solid waste outside, even if only for a short time, incompatible with safe airport operations if they are located within a 10,000 foot radius of an active airport runway. See FAA Advisory Circular 150/5200 33B (Hazardous Wildlife Attractants On or Near

Airports) at pg. 4, § 2 – 2. Thus, the presence of uncovered municipal solid waste at the West Lake Landfill may place the City in violation of 1998 FAA ROD. The Work Plan does not explain how the Respondents/Operators will comply with the terms of the NEA or Missouri Solid Waste Regulation daily landfill soil cover requirements during excavation and transport of contaminated municipal solid waste from the landfill. Any remediation objective selected by EPA for the West Lake Landfill must ensure that the remediation activities do not create a wildlife attractant that presents an intolerable risk of aircraft bird strikes at the Airport.

The excavation, movement and transportation of radiologically impacted municipal waste required during the response action at the West Lake Landfill is consistent with the characteristics of an operational solid waste landfill, as described in the Missouri Solid Waste Regulations. As a result, certain operational requirements (i.e. daily cover and surface water management) and landfill site selection standards (i.e. airport safety, flood plains, wetlands, seismic impact zones and unstable areas) will apply to the excavation alternatives described in the Work Plan. See 10 CSR 80-3.010 (4)(B)(1 – 6); 10 CSR 80-3.010(1)(C) (classifying non-compliant sanitary landfills as open dumps that are prohibited by law).

Missouri Solid Waste Regulations prohibit landfill operations within a 10,000 foot (3,048 meters) radius of any airport runway end used by turbojet aircraft unless the operators can demonstrate that the landfill operations pose no bird hazard to aircraft. See 10 CSR §80-3 (Sanitary Landfill). The Respondents/Operators must demonstrate the remediation activities at the Bridgeton Landfill, portions of which are located within a 10,000 foot radius of the Airport's runway 11/29, do not pose a hazard to aircraft using the Airport's facilities; or at the very least, do not increase the likelihood of bird/aircraft collisions. See Lambert – St. Louis International Airport Expansion Runway to Landfill Distance Study. It is very likely that the excavation and disposal alternatives contemplated in the Work Plan will disrupt the wildlife mitigation efforts undertaken by the City pursuant to the 1998 FAA ROD, and increase the likelihood of bird/aircraft collisions at the Airport. FAA Advisory Circular 150/5200 – 33B suggests that Respondents/Operators will not be able to mitigate the risk of wildlife strikes to aircraft during excavation and disposal activities at the Bridgeton/West Lake Landfill; as no facility has been able to demonstrate an ability to reduce and sustain hazardous wildlife to levels that existed before the putrescible-waste landfill began operating. See Hazardous Wildlife Attractants On or Near Airports - Advisory Circular 150/5200 – 33B. In fact, FAA does not even allow landfill operators to conduct demonstrations of experimental wildlife control measures within a 10,000 foot radius of an airport because of this perfect failure rate. Id. Thus, it seems that the Respondents/Operators will not be able to demonstrate that excavation and landfill activities at the Bridgeton/West Lake Landfill do not pose a threat to aviation operations at the Airport, particularly since the FAA /USDA have already determined that the municipal waste operations at the Bridgeton/West Lake Landfill are a hazardous wildlife attractant for the Airport. See

June 2004 Lambert – St. Louis International Airport Wildlife Hazard Assessment for the Bridgeton Sanitary Landfill.¹

Missouri Solid Waste Regulations also require all operating solid waste disposal sites to cover “disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals, as necessary, to control disease vectors, fires, odors, blowing litter and scavenging . . .”. *See* 10 CSR 80-3 (17)(C)(1). Missouri’s Solid Waste Regulations should be applicable to the remediation activities contemplated at the West Lake Landfill, which consist of exposing municipal/putrescible waste that may attract wildlife, disease vectors, blowing litter and risks of fire. The risk of creating a wildlife attractant near the Airport mandates that Respondents/Operators comply with Missouri daily landfill cover requirements during any excavation or disposal activities at the West Lake Landfill. The necessity of compliance with 10 CSR 80-3(17) may further complicate the remediation objectives by creating additional quantities of radiologically contaminated soils for disposal and increase cost and duration estimates contemplated under the Work Plan. However, any failure to comply with the daily cover requirements would create an unacceptable risk to aviation operations at the Airport. The lack of daily cover would also contribute to the distribution of low level radioactive contamination throughout the site by allowing surface waters to come in contact with uncovered radiologically contaminated municipal waste material, and possibly air blown dust, without adequate controls. Missouri Solid Waste Regulations require all active solid waste disposal sites to minimize environmental hazards and conform to applicable ground and surface water quality standards. *See* 10 CSR 80-3 (8). The Work Plan does not explain how the Respondents/Operator’s will manage daily landfill cover requirement, or the surface waters and wind blown dust that come into contact with radiologically-impacted waste materials exposed during remediation activities.

The City is also concerned that Respondents/Operators have not identified a viable disposal location for the radiologically-impacted municipal wastes and soils that will be excavated from the West Lake Landfill. The proposed on-site engineered disposal cell location (OU-2 Stockpile Area) is not an appropriate site for long term storage of the radiologically impacted waste due to regulatory and capacity restrictions, and there is no licensed treatment, storage or disposal facility that may accept a mixture of radiologically impacted soils and municipal waste. The Work Plan indicates that the existing OU-2 Stockpile Area is the only location on the West Lake Landfill property that the on-site engineered disposal cell may be sited due to the geomorphic flood plain. However, this location, approximately 8,000 feet from the Airport, is incompatible with

¹ Similar to the Missouri solid waste regulations, the Missouri legislature specifically promulgated legally applicable requirements prohibiting the creation or establishment of airport hazards within 2 miles (10,560 feet) from an airport boundary. *See* Mo. Rev. Stat. § 305 (Aircraft and Airports). Local regulations further prohibit the use of land or water near the Lambert – St. Louis International Airport in such a manner as to create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of any aircraft intending to use the airport. *See* St. Louis County, Missouri Ordinance 1003.161 (Air Navigation Space Regulations – including height restrictions for structures near the Airport). To the extent remediation activities at the Bridgeton Landfill present a risk of bird/aircraft strikes, such activities are contrary to the interests of public health, safety and general welfare; and a violation of Missouri zoning laws.

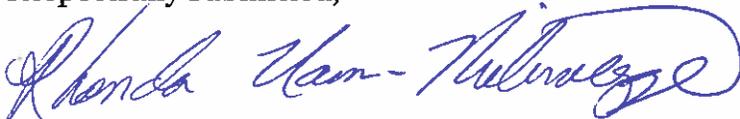
state and federal regulations that prohibit the placement of a new solid waste disposal site within a 10,000 foot radius of an active runway, with one statute requiring a minimum separation 6 miles between the airport and a new disposal location. See 40 CFR §258.10 (Airport Safety); 40 CFR §258.16 (Closure of Unsafe Landfills); 10 CSR §80-3 (Sanitary Landfill); 49 USC 44718 (Structures Interfering with Air Commerce); FAA Advisory Circular 150/5200 – 34A (Construction or Establishment of Landfills Near Public Airports), see also, Negative Easement Agreement. Furthermore, it is not clear that the OU-2 Stockpile Area could accommodate the quantity of radiologically impacted waste (also unknown) that will be excavated from Radiological Areas 1 and 2, which would include additional quantities of contaminated landfill cover material generated on a daily basis. The process of selecting and evaluating a location for the on-site engineered disposal cell must comply with state and federal landfill siting requirements; but sets forth no methodology to address the direct prohibition against placement of a new landfill disposal site within a 10,000 foot radius of an active airport runway.

The EPA Responsiveness Summary and Work Plan also indicate that Respondents/Operators are aware of no licensed treatment, storage or disposal facility that can accept radiologically impacted soils and municipal solid waste; and there are no feasible methods of separating contaminated soils from municipal waste without creating additional unnecessary risks of harm to human health or the environment.

As a final comment, we respect the possibility, however unlikely, that the Earth City Levee System, which protects the area from a 500 year flood event, might be breached and flood waters might cover the current landfill site. However, when the City last reviewed EPA's prior selected remedy, it learned that such a circumstance would have little if any environmental significance in light of steps that would be taken to further cap the existing site under EPA Preferred Alternatives L4/F4. Recognizing that EPA must deal with possibilities and weigh their likelihood at times, the reality is that bird strikes happen at the Airport, even with the current reduction in attractant sites and mitigation measures. No one wants to be in the position of trading risks associated with an unlikelihood or theoretical possibility for reality. Any balancing of risks must take reality into account.

The City reserves the right to amend or provide additional comments concerning the proposed remediation activities at the West Lake Landfill. The City also requests that EPA and/or Respondents provide regular updates concerning their progress toward selecting a remedy for the West Lake Landfill.

Respectfully submitted,



Rhonda Hamm-Niebruegge
Director of Airports