MVCCA RESOLUTION J-2014-01

Joint Resolution on Special Exception Amendment to Extend and Expand Lorton Construction Debris Landfill and Build Lorton Green Energy Park

- 1. Whereas, Expanding capacity at Lorton construction and demolition debris (CDD) landfill is not consistent with the Comprehensive Plan or the county's Solid Waste Management Plan, and the evidence suggests that CDD source reduction and recycling are both feasible, readily available in the region, and far more environmentally beneficial and sustainable approach¹;
- 2. Whereas, Landfills generate methane, an air pollutant 20 times more potent than carbon dioxide as a greenhouse gas; if the landfill's capacity is expanded and filled, methane will continue to be created at an increasing rate long after closure;
- 3. Whereas, The proposed methane collection would leave 25% to escape into the atmosphere;²
- 4. Whereas, The proposed 70' earthen berm wall holding back the 412' mountain of debris is a highly engineered structure that will require maintenance in perpetuity to ensure its stability, and the development conditions do not provide for its maintenance forever and the staff report does not address this issue;
- 5. Whereas, Wind turbines (proposed atop the landfill) pose a risk to resident and migratory birds and bats;
- 6. Whereas, The project site is in the immediate vicinity of a **Key Migration Corridor** and **Key Habitat for Bald Eagles** identified by American Bird Conservancy (www.ABCBirds.org/org/extra/windmap.htm), and
 - a. 10 active Bald Eagle nests are within a few miles,
 - b. A concentrated roost of 80 or more Bald Eagles is at Mason Neck Wildlife Refuge³, and
 - c. Eagles are observed at the landfill;
- 7. Whereas, Furnace Associate's development conditions do not follow U.S. Fish and Wildlife Service and American Bird Conservancy best practices⁴ for siting, constructing, and operating wind turbines to minimize bird fatalities, and have no provision for
 - a. Pre-construction assessment of the suitability of the site,
 - b. Post-construction monitoring of bird and bat fatalities by qualified professionals (not volunteers),
 - c. Public disclosure of data, and
 - d. Operational curtailment if fatalities exceed a tolerable limit;
- 8. Whereas, The MVCCA supports efforts to provide more renewable energy and reduce dependence on energy sources that generate greenhouse gas emissions that are major drivers of climate change;
- Whereas, Furnace Associates has proposed neither preliminary studies of energy potential and wildlife impacts, nor follow-on procedures or management of the Green Energy Park after Furnace Associates closes the landfill;

¹ The Fact Sheet: on History, Character, Landfill Expansion, and Wildlife Impacts is hereby attached to this Resolution. It explains background information and provides findings essential to consideration of the proposal.

² P. 22, Final Report: Feasibility Study for Renewable Energy Technologies Lorton Energy Park, Lorton Landfill, Virginia. Prepared by Geosyntec Consultants, Aug. 17, 2011.

³ 2013 Fish and Wildlife Service bird survey.

⁴ www.fws.gov/windenergy/docs/WEG_final.pdf, www.abcbirds.org/abcprograms/policy/collisions/wind_policy.htmls

10. Whereas, truck traffic and the debris associated with these vehicles continue to be a problem for the neighboring community and for other vehicles, pedestrians, and bicyclists traveling along the roads near the landfill, and

Whereas, In summary:

- 1. Landfilling is the least preferred method of solid waste management, and has high environmental costs,
- 2. Expanding landfill capacity competes with preferred and more environmentally benign methods of CDD management, and
- 3. The environmental benefits of this project are more than offset by its environmental harms; now, therefore be it

Resolved, That the MVCCA opposes SEA-2.

Resolved. That MVCCA supports modification of SEA-1 that would:

- a. Not increase landfill capacity beyond that allowed under SEA-1, and
- b. Release Furnace Associates from the approved public park uses and park amenities and the dedication requirement of SEA-1, and
- c. Extend the closure date by SEA-1 by 5 years or less to allow Furnace Associates to operate the landfill to meet its SEA-1 capacity, and
- d. Add a development condition that restricts Furnace Associates' trucks from arriving southbound or departing northbound on Furnace Road to and from the mixed waste reclamation facility, if built, and
- e. Incorporate the proposed planting/vegetation plan from SEA-2 as development conditions in a modified SEA-1, and
- f. Include as a development condition a regular inspection schedule by the urban forest manager to ensure that plantings are installed and maintained as called for by the plan.

Resolved. That MVCCA asks the county and Furnace Associates to add development conditions if SEA-2 is approved:

- a. Add a development condition to provide for maintenance of the berm wall in perpetuity.
- b. Modify Proposed Development Condition 53 to ensure best practices to avoid bird fatalities are followed (see Attached Factsheet, Wildlife Impacts).
- c. Add a development condition to describe procedures and management of the Green Energy Park after Furnace Associates closes the landfill.

Resolved, That MVCCA supports Furnace Associates collecting data and developing a design and plan for a fully functioning Green Energy Park, rather than an interim use demonstration project.

Resolved, That MVCCA urges the county and Furnace Associates to make a final effort to create Overlook Ridge Park (by obtaining insurance, or dedicating the land to a third party, such as a qualified land trust, or another way) and to address ESI's concerns about indemnification and liability.

THIS RESOLUTION WAS PASSED BY THE MVCCA GENERAL COUNCIL AT THEIR MEETING ON 2.26.2014

Attachment. Fact Sheet on History, Character, Landfill Expansion, and Wildlife Impacts

History

- 1. In January 2007 the Special Exception to operate the Lorton construction and demolition debris (CDD) landfill was amended (SEA 80-L/V-061, or SEA-1) to allow an increase in height from 290' to 412', revegetate and landscape, provide public trails and park amenities, close the landfill in 2019, create Overlook Ridge Park, and dedicate the land to Fairfax County Park Authority (FCPA).
- 2. In March 2009 the FCPA Board voted not to accept dedication of the property.
- 3. Furnace Associates has still not successfully landscaped and reforested the site, and the hillside is an unattractive southern gateway to Fairfax County.
- 4. Furnace Associates now requests a second amendment to the Special Exception (SEA 80-L/V-061-2, or SEA-2) to extend landfilling through 2040, build a 70' earthen berm wall to enlarge capacity, remove the public park uses and dedication requirement and establish renewable energy facilities (wind, solar, geothermal, and methane gas collection) as an interim use pilot demonstration project called "Lorton Green Energy Park."

Character

- 5. The Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District as amended through April 9, 2013, LP2 Lorton-South Route 1 lists as major objectives:
 - a. Develop a strong "sense of place" and positive image for the Lorton-South Route 1 area;
 - b. Implement the positive image and sense of place through the "Town Center" concept and provide for retail, governmental and commercial offices, cultural facilities, and community services at the Center and at other key sub-units;
 - c. Proposed land uses should be limited to those uses which will promote an improvement in the image of the area;
 - d. Preserve and protect existing, stable residential neighborhoods;
 - e. Buffer residential areas from abutting and otherwise intrusive, adjacent, nonresidential uses that have odor, noise and visual impacts;
 - f. Protect stable neighborhoods from encroachment by commercial, industrial, higher density residential projects or other disruptive land uses such as landfills, incinerators, institutions, etc.;
- 6. Community Planning Sector (pp.63, 64,75) states:

"[While] the largest area planned for recreation or public park uses in the sector ... currently contains a large private debris landfill, it is envisioned that when landfill operations cease that this area will be developed with private or public recreational uses such as a golf course...," and

"Sub-unit B4 contains a private debris landfill. To help mitigate any visual impacts upon the surrounding area, buffers should be maintained around the landfill. When the landfill is built-out, it is recommended that the site ultimately be developed with active recreational uses such as a golf course."

7. The proposed use of generating wind energy through wind turbines up to 180' in height atop a 412' artificial mountain is not in keeping with the character of nearby residential neighborhoods, nor the character of land designated in the Comprehensive Plan for recreational use;

Landfill Expansion

- 8. Fairfax County's Solid Waste Management Plan advocates a hierarchy of source reduction, reuse, and recycling as preferred methods of waste management, with landfilling the least preferred method, due to its high economic and environmental costs.
 - a. The plan for managing solid waste includes the following elements to address CDD:
 - b. Develop a regional approach to CDD source reduction and reuse, and foster a regional approach to its disposal;
 - c. Encourage increased CDD recycling by promoting it at a county location;
 - d. Revise regulations to enhance recycling;
 - e. Continue using CDD landfills in- and out- of county.
- 9. The Comprehensive Plan states as Environment Objective 13, Policy a, "...encourage the application of energy conservation, water conservation and other green building practices...," including "recycling/salvage of non-hazardous construction, demolition, and land clearing debris."
- 10. The Northern Virginia Waste Management Board lists six CDD landfills and 15 CDD recycling/recovery facilities in the region.⁵
- 11. Public Facilities Objective 34, Policy b of the Comprehensive Plan states: "Prior to the expansion of the Energy/Resource Recovery Facility or other waste management facilities, comprehensively consider the costs, benefits and effects of other alternatives including recycling and waste reduction for the protection of the public health, public safety, the environment, and natural resources."
- 12. The Energy/Resource Recovery Facility, the Lorton CDD landfill, and other privately owned facilities are part of Fairfax County's comprehensive, integrated solid waste management system.
- 13. There has been no comprehensive cost-benefit analysis of the environmental, economic, or public health costs and benefits of expanding the Lorton landfill, in particular:
 - a. Neither Furnace Associates nor county staff has demonstrated a need for additional CDD landfill capacity within Fairfax County.
 - b. The environmental costs and benefits of expanding landfill capacity and capturing 75% of the methane generated, versus closing the landfill and ending the production of methane, have not been evaluated.
 - c. The impacts of expanding CDD landfill capacity at the Lorton landfill on the rate of CDD recycling, and on the economic viability of CDD recycling, the county's preferred method of waste management, have not been evaluated.
- 14. A recent study estimates that by following best practices, 75% of CDD could be recycled nationally by 2030, and Massachusetts achieved an 80% CDD recycling rate in 2010.6
- 15. CDD recycling in Virginia increased from 2% in 2000 to 11% in 2010⁷, but is still very low.

⁵ Public Solid Waste Services in the Washington Metropolitan Region. Prepared by the Northern Virginia Regional Commission for the Northern Virginia Waste Management Board, January 2012.

⁶ More Jobs, Less Pollution: Growing the Recycling Economy in the U.S. Prepared by Tellus Institute with Sound Resource Management.

- 16. The Lorton CDD landfill reported to DEQ that it recycled 0.47% of the 1,029,823 tons arriving at the facility in 20128, landfilling the other 99.53%.
- 17. The only CDD recycling facility in the area certified by Recycling Certification Institute (RCI) (www.reyclingcertification.org) recovers and recycles 68% of construction debris, sends burnable residuals to the Energy/Resource Recovery Facility and the remainder to a landfill⁹.
- 18. The debris arriving at the landfill from out-of-state (37% of the total came from Maryland in 2012¹⁰) would best be recycled nearer the source, reducing vehicle emissions and improving air quality.

Wildlife Impacts

- 19. Risks of bird collision mortality¹¹ are especially great for eagles and other raptors, as documented in Wyoming¹², Altamont Pass CA¹³, and Smola Island Norway¹⁴, where nearly the entire population of White-Tailed Eagles has been extirpated by a wind farm.
- 20. 168 species of birds are documented in the Lorton-Laurel Hill area, including a dozen or more species of hawks that migrate over the Laurel Hill uplands west of the Potomac River in spring and fall, with most hawk species resident and foraging year round (Bald Eagle, Red-shouldered and Red-tailed Hawks) or seasonally (Northern Harrier, Osprey, American Kestrel, Merlin, Peregrine Falcon).
- 21. A 2012 Virginia Natural Heritage survey identified three species present at Fort Belvoir (Tri-Colored Bat, Big Brown Bat, and Red Bat). Bats are killed because they are attracted to the wind turbines, and are vulnerable to mortality from them due to low reproductive rates.¹⁵
- 22. Furnace Associates has applied for an "incidental take" ¹⁶ permit from the U. S. Fish and Wildlife Service (FWS) since wind turbines have killed bald eagles in similar locations, making the Planning Commission and the Fairfax County Board of Supervisors complicit in endangering, disturbing, and possibly killing Bald Eagles if SEA-2 is approved and accepted protocols are not followed.
- 23. There can be a substantial financial risk in building wind turbines in a site where birds are likely to be killed, since the U.S. Department of Justice criminally convicted a wind energy company for violating the federal Migratory Bird Treaty Act, ordered \$1 million in fines and restitution for Golden Eagle deaths in Wyoming, and issued a stern warning against siting turbines in areas where avian collision risk is high.¹⁷

⁷ Virginia Department of Environmental Quality, Solid Waste Managed in Virginia, annual reports; DEQ warns that recycling rates are underestimated due to gaps in required reporting.

⁸ Solid Waste Information and Assessment Program Reporting Table, reported by Lorton CDD Landfill to DEQ.

⁹ Solid Waste Information and Assessment Program Reporting Table, reported by Broad Run Construction Waste Recycling to DEQ.

¹⁰ Solid Waste Information and Assessment Program Reporting Table, reported by Lorton CDD Landfill to DEQ.

¹¹ For a recent scientific review, see S. R. Loss, T. Will, P. Marra. Estimates of bird collision mortality at wind facilities in the contiguous United States. Biological Conservation 168 (201–9). Dec. 2013. www.abcbirds.org/newsandreports/releases/131210a.html. See also Ledec et al. 2011, *Greening the Wind: Environmental and Social Considerations for Wind Power Development*, World Bank and www.abcbirds.org/abcprograms/policy/collisions/wind_policy/html

¹² Energy Company to pay \$1 million in wind turbine eagle deaths, LA Times 24 Nov. 2013, at http://articles.latimes.com/2013/nov/24/nation/la-na-nn-wind-energy-eagle-death-20131123

¹³ Wind power turbines in Altamont Pass threaten protected birds. LA Times 6 June 2011 at http://articles.latimes.com/2011/jun/06/local/la-me-adv-wind-eagles-20110606

¹⁴ Wind farm hits eagle numbers, BBCNews, 23 June 2006, at http://news.bbc.co.uk/2/hi/5108666.stm

^{15;} see G. Ledec op.cit.

¹⁶ An incidental take permit can be issued by FWS to allow for the unintentional deaths of Bald Eagles or other protected species at wind turbine facilities. "Take" is defined as "pursue, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." 50 C.F.R. § 22.3.

^{17 &}quot;For wind projects, due diligence during the pre-construction stage—as described in the 2003 Interim Guidelines and tiers I through III in the 2012 LBWEGs—by surveying the wildlife present in the proposed project area, consulting with agency professionals, determining whether the risk to wildlife is too high to justify proceeding and, if not, carefully siting turbines so as to avoid and minimize the risk as much as possible, is critically important because... at the present time, no post-construction remedies, except curtailment' (i.e., shut-down), have been developed that can 'render safe' a wind turbine placed in a location of high avian collision risk" http://www.justice.gov/opa/pr/2013/November/13-enrd-1253.html