ATTACHMENT 1 - COMPLETENESS DETERMINATION FOR THE EPL PROPOSED WESTERN EXPANSION FEASIBILITY REPORT LETTER, APRIL 1, 2014

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
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April 1, 2014 FID #: 268244130 SW/CORR

Mr. Dave Geier Site Manager Advanced Disposal – Emerald Park Landfill W124 S10629 South 124th Street Muskego, WI 53150

SUBJECT: Completeness Determination for the Advanced Disposal Emerald Park Landfill Proposed Western Expansion Feasibility Report (Lic#: 3290)

Dear Mr. Geier:

We have reviewed for completeness the report entitled "Western Horizontal Expansion Feasibility Report – Advanced Disposal Services LLC- Emerald Park Landfill". The report dated January 2, 2014, was prepared by Cornerstone Environmental Group, LLC (Cornerstone), on behalf of Advanced Disposal Services (Advanced) and was received by the Department on January 2, 2014.

Based on our review, we have determined that the feasibility report is complete. This is not an approval of site feasibility but does confirm that the minimum information required by Chapter NR 512, Wis. Adm. Code, and s. 289.24 (3), Wis. Stats. has been provided.

The following was submitted as part of the feasibility report:

- Additional information received by e-mail, dated February 19, 2014 from Cornerstone, in response to a February 4, 2014 department request for information. The additional information included:
 - information regarding the abandonment of private wells PW-1, PW-2 and PW 7;
 - a copy of the July 6, 2011 letter sent to the affected municipalities requesting the specification of all applicable local approvals, and;
 - the July 19, 2011 response from Waukesha County and the July 23, 2008 response from the city of Muskego.

In accordance with the department's June 6, 2011 letter, the department reviewed the "Southwest Horizontal Expansion Feasibility Report – Veolia ES Emerald Park Landfill, LLC", dated January 30, 2009, and subsequent addenda as part of the January 2, 2014 feasibility report. The 2014 proposed western expansion is essentially the same as the 2009 proposed southwest expansion, except that the 2014 proposal calls for maintaining a minimum separation distance of 600 feet to the nearest water supply well, which is greater than the 2009 proposal. Addenda and additional information submitted for the 2009 feasibility report include:

- A report entitled "Addendum No. 1 Feasibility Report Southwest Horizontal Expansion Veolia ES Emerald Park Landfill, LLC", dated November 25, 2009, prepared by RMT, Inc., on behalf of Veolia Environmental Services (Veolia) and received by the Department on November 30, 2009.
- A revision to Addendum No. 1, dated December 8, 2009 and received by the Department of December 10, 2009.



• Additional information to the feasibility report received on the following dates: January 25, 2010, February 23, 2010 and March 10, 2010.

At this time the Department will issue a public notice in *The Freeman*, *The Racine Journal Times* and in the *Milwaukee Journal Sentinel* and invite public comments for a period of 30 days on the content and completeness of the feasibility report and the enclosed environmental analysis (EA). It may take about one week for the public notice to get published. The Department will distribute the EA to the clerk of each affected municipality and the main public library in each affected municipality. The Department will also post an electronic copy of the feasibility report, addendum, additional information and the EA on its internet web site at http://dnr.wi.gov/topic/Waste/Comment.html during the 30-day public comment period.

Please note that upon receipt of this determination, s. 289.24(4) and s. 289.32, Wis. Stats., requires that the applicant immediately distribute copies of the feasibility report, addenda and any additional information submitted as part of the feasibility report to the clerk of each affected municipality and the main public library in each affected municipality. This also includes either a copy of the entire 2009 feasibility report and addenda or those sections of the 2009 feasibility report that are not included in the 2014 feasibility report, but are referenced. This appears to include appendices D, G, L, M, U and X.

Although the minimum information required for completeness has been submitted, we are requesting that you submit the following additional information to us so that a feasibility determination can be made. The remainder of this letter is divided into two sections. Part A contains the additional information needed and part B contains items that Advanced should be aware of.

Part A: Additional Information Needed in Order to Make a Feasibility Determination:

1. Wetlands and Navigable Waters - Individual Wetland Permit and wetland functional values assessment:

An individual wetland permit in accordance with s. 281.36, Stats. and a wetland functional values assessment in accordance with s. NR 103.08 (4) 3, Wis. Adm. Code will be needed. Below is a summary of what is required and the procedural process.

<u>Background</u>: The proposal calls for eliminating approximately 12.9 acres of wetland (wetlands W-9 & W-12). Section 281.36, stats. supersedes the procedural requirements and the practicable alternatives analysis (PAA) requirements of ch. NR 103.08 (3) (b), Wis. Adm. Code. However, the functional values assessment requirements of NR 103.08 (4) 3, Wis. Adm. Code remain in effect.

What needs to be included in the wetland permit application:

- a PAA that includes an evaluation, drawings if applicable, and cost analysis of the following options:
 - expanding on the Future Parkland property to the north,
 - an expansion that avoids or minimizes wetland impacts, such as W-12:
- a proposed wetland mitigation plan;
- an amended plan sheet 30 delineating the anticipated extent of wetland impacts along the landfill perimeter berm and service road and showing the approximate location of wetland protection barriers, such as silt fence, boulders, etc. This wetland impacted area beyond the limits of waste, which includes the perimeter berm, service road and any equipment access corridor, beyond the

perimeter berm and road needed to construct perimeter berm and road, needs to be included in the total number wetland acreage to be impacted

- an assessment of wetland impacts that would be caused from changes to the surface water drainage patterns. The application should include a water balance evaluation to show which wetlands would experience an increase in surface water flow and which wetlands may experience a decrease. It should also evaluate if any increases or decreases will have a significant effect. This should include wetlands 4, 10, 11 and the remaining parts of wetlands 9 and 12.
- The wetland permit application should address what appears to be a perceived discrepancy between number of acres of wetland proposed to be filled in the 2014 feasibility report (12.9) and the number of remaining acres from the 2009 feasibility report (13.49) which amounts to an approximate difference of 0.59 acres:

14.3 (2009 acres requested to fill) -0.812 (2009 acres approved to fill for W-6, W-6a & W-7) = 13.49 acres.

<u>Timing:</u> Contrary to our discussions on October 7, 2013, we have determined that a wetland permit would need to be obtained at about the same time as the feasibility determination. The reason for this is because the feasibility determination needs to demonstrate that the performance standard of NR 504.04 (4) (a), Wis. Adm. Code is met and the Plan of Operation needs to establish the approved landfill footprint and design. A delay in issuing a wetland permit until after the Plan of Operation Approval would create an uncertainty in the approved limits of waste and landfill design.

We ask that the wetland permit application be submitted at such time that a wetland permit determination can be made at about the same time as the feasibility determination. We will notify Advanced of the optimal time to submit the wetland permit application.

<u>Procedural Process</u>: This spring, during the growing season, Advanced will need to re-delineate the wetlands for department and Army Corps of Engineers (ACOE) concurrence and the department will need to do a wetland functional values assessment. After Advanced re-delineates the wetland boundaries, Advanced will need to submit the wetland delineation report to the department. Department staff will then arrange to do a site visit with Advanced and ACOE to conduct a delineation concurrence. Advanced should have the wetland boundaries flagged at the time of the site visit. Department staff will also conduct a wetland functional values assessment and will reassess the navigability of the ditches. This includes ditches D2, D3 and D4 and any other potential ditches in the proposed project area.

2. <u>Final Cover Design</u>: Please provide a clarification of the final cover design, including a revised narrative contained on pages 9-4 and 9-5 of the 2013 feasibility report and additional cross-sectional details.

It appears from the 8.5 foot thickness description on page 9-5 of the 2013 feasibility report, that geomembrane and the geonet composite drainage layers will be placed only on the 3:1 slopes. In addition the second and third sentences highlighted in yellow on page 9-4 are not clear. It's not clear if only certain portions of phases 8 and 9 will have the increased cover thickness and where those sections are. It is also not clear from the detail on plan sheet 33 and narrative how the final cover ties in with the peak and transitions to the 10% slope.

Part B: Other Feasibility Determination items that Advanced should be aware of:

1. Needs & Site-life:

A. Needs: Our needs analysis shows that there are about 8 years of capacity remaining in the EPL service area. A general rule of thumb is if there are less than 7 years of service area capacity

remaining, then there is a need for the expansion because it can take 5 to 7 years to site a new landfill. Therefore EPL falls just outside of the 7-year window in 2014; however, starting in 2015 EPL would be in that window. By the time EPL would begin construction in the expansion area (2015 or after), it appears that there would be a need for the proposed facility.

- B. Site Life: Our site-life calculations show a 22 to 23 year site-life without the city of Milwaukee contract and an 11-year site-life with the city of Milwaukee contract. In order to be compliant with s. 289.29 (1) (d), Stats., which limits the landfill capacity to meet an expected site-life to be within 15 years, the feasibility determination will condition that the plan of operation report adjust the landfill capacity and footprint to meet this requirement. The plan of operation report should be submitted after the city of Milwaukee waste contract bidding occurs.
- C. Our calculations used a couple of different values than the feasibility report used. Below are the differences:
 - i. State-wide per capita waste generation rate: The feasibility report used 9.6 lbs./cap/day, which is an average of the state-wide generation rate for the years 2003 through 2012. We used 8.0 lbs./cap/day because that is what the calculated value has been for the most recent three years. Since the per-capita waste generation rate has been declining or holding steady, we do not believe it is valid to average in older, higher rates.
 - ii. The contribution of waste generated per county to the service area: The feasibility report uses a percentage of available landfill capacity for those landfills located in overlapping service areas. For example the report states that only 77% of the remaining capacity at the Deer Track Park Landfill is available to the EPL service area. However, the report also uses the entire population of Jefferson County in its waste generation calculations for the service area. Our calculations use a weighted population consistent with the available landfill capacity for the landfill that is located in that county. For those counties such as Ozaukee that do not have a landfill, we give EPL the benefit of the doubt and count all of its population.

This is done in order to be consistent with the percentage of landfill capacity available in the service area. If only a percentage of the remaining landfill capacity of the landfill(s) located in those counties is going to be counted for the service area, then only that same percentage of waste generated in those counties by population should be counted. Otherwise the waste generation is over estimated.

2. Storm Water Runoff Management:

The proposed storm water infrastructure presented in the feasibility report is designed primarily to achieve the standards contained in s. NR 504.09, Wis. Adm. Code. As we discussed during the 2009 feasibility review, the current s. NR 504.09, Wis. Adm. Code, standards may no longer meet the storm water control standards contained in chs. NR 216 and NR 151, Wis. Adm. Code. A favorable feasibility determination may condition that the plan of operation report contain an evaluation of the ch. NR 151 storm water design, provided in the Technical Standards, compared to the NR 504.09 storm water design. NR 151 performance standards generally include:

A. Sedimentation Basin Design:

Sedimentation basins designed with a permanent pool and outlet release to settle 80% of Total Suspended Solids (TSS) through the active life of the landfill. The Department's 80% TSS control standard is based on an annual average storm series.

The Department's Construction Site Erosion & Sediment Control Standards can be used to achieve the goal of 80% TSS. The standards are accessible at http://dnr.wi.gov/topic/stormwater/standards/const standards.html

Specifically, the Sediment Basin standards that could be an appropriate application for this project are located at http://dnr.wi.gov/topic/stormwater/documents/SedimentBasin_1064.pdf and http://dnr.wi.gov/topic/stormwater/documents/WetPondStd1001.pdf

B. Erosion Control

Locations of concentrated flow areas with a shear stress of 0.6 pounds per square foot (psf.) or greater should receive appropriate erosion matting or other erosion stabilization. Concentrated flow areas with 5 feet per second (fps) or greater velocities should receive some form of permanent erosion stabilization such as a turf reinforcement mat or riprap. Please evaluate whether the swale/channelized flow down the basin slopes would be given rip rap or other permanent stabilization to keep the basin slope stable from erosion and include permanent protection as appropriate at such locations. Other erosion control measures may also be required through the operational life of the landfill.

Below is a table that points out the general differences between NR 504.09 and Technical Standards 1064 & 1001:

NR 504.09	Tech Standard 1064	Tech Standard 1001
25 yr – 6 hr. time of concentration	1 yr – 24 hr. time of concentration	2 yr – 24 hr. time of
storm event	storm event	concentration storm event
Particle Size: 15 mm (loam, silt & silty	80% TSS Control based on dominant	80% TSS Control based on
loam)	soil entering basin	dominant soil entering basin
Emergency Spillway: 100-yr storm	Emergency Spillway: 10 yr – 24 hr.	Emergency Spillway: 100 yr – 24
event	storm event	hr. storm event
Dry Sed Basin	Wet Sed. Basin	Wet Sed. Basin

3. NR 140 Preventative Action Limits (PALs), Alternative Concentration Limits (ACLs) and Well Status:

A. Remaining PALs and ACLs needed for existing monitoring wells:

There were some wells for which indicator parameters could not be calculated for the June 9, 2011 Plan of Operation approval because some of the baseline data did not meet all of the quality control flags. Additional baseline data was needed to have the minimum eight sample rounds to calculate PALs. A favorable feasibility determination may condition that the plan of operation report include proposed calculated PALs for those indicator parameters and wells. In addition, a favorable feasibility determination may require new baseline groundwater sampling for arsenic because the NR 140 arsenic PAL and enforcement standard (ES) were lowered since the original baseline sampling conducted at the site's monitoring wells in the 1990s. The older arsenic baseline sample data used a higher laboratory limit of detection, than the current NR 140 PAL.

B. There appear to remain some discrepancies between the department's GEMS data base and information contained in the feasibility report regarding well status for some of the older wells, such as MW-19A, MW-109A and MW-120D. A favorable feasibility determination may require that the plan of operation report include an updated comprehensive well information form (WIF) for the whole site, copies of well abandonment forms for some previously abandoned wells and well construction reports for any replacement wells.

- 4. Abandonment of private wells PW-10 and PW-11: A favorable feasibility determination may condition additional abandonment procedures for private wells PW-10 and PW-11 than the minimum abandonment requirements contained in ch. NR 812, Wis. Adm. Code. Because these two private wells are located in an area of future landfill construction, the department may require that the well casings be perforated so that sealing grout can be pumped into any cavities or voids in the annular space or surrounding formation. This may provide an improved seal and better protection to the groundwater.
- 5. <u>Navigable Ditches and Fish:</u> A favorable feasibility determination or plan of operation approval may require that a fish survey be done in the navigable ditches before they are impacted to determine if any fish are present at the time and if so, an evaluation to mitigate or minimize any impacts to fish.

You should be aware that as the department continues its feasibility review or after it receives comments on the feasibility report and EA, the department may require additional information from Advanced before it can make a feasibility determination.

NOTICE OF APPEAL RIGHTS

If you believe you have a right to challenge this decision made by the Department, you should know that Wisconsin statutes and administrative codes establish time periods and requirements for reviewing Department decisions.

To seek judicial review of the Department's decision, sections 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. You have 30 days after the decision is mailed or otherwise served by the Department to file your petition with the appropriate circuit court and serve the petition on the Department. The petition shall name the Department of Natural Resources as the respondent.

If you have any questions regarding this determination, please contact Joe Lourigan, WDNR Waste and Materials Management Hydrogeologist, at 608-267-9386.

Sincerely,

Franklin C. Schultz, Supervisor

Waste and Materials Management Program

Southeast Region, WDNR

c:

Water Supply Well Owners on Union Church Drive (public notice & drawing of proposed limits of waste)

Tyler Field, Cornerstone Environmental Group

Jay Warzinski, Advanced Disposal (electronic copy)

Jo-Walter Spear, J. Spear and Associates (electronic copy)

Charlene LeMoine, Waukesha Environmental Action League (electronic copy)

Marie Kopka, ACOE (electronic copy)

Joe Lourigan, WA/5

Robert Grefe, WA/5 (electronic copy)

Ann Bekta, WA/SCR - Janesville (electronic copy)

Jesse Jensen, WT/SER - Waukesha (electronic copy)

SER File