Appendix B:

Written Comments Submitted by Small Entity Representatives in 2013

Small Business Advocacy Review Panel on EPA's Planned Proposed Rules Standards of Performance for Municipal Solid Waste Landfills and Review of Emissions Guidelines for Municipal Solid Waste Landfills

The U.S. Environmental Protection Agency (EPA) conducted a pre-panel outreach meeting with potential Small Entity Representatives (SERs) on October 30, 2013. EPA, along with Panel partners, Small Business Administration's Office of Advocacy (SBA), and Office of Management and Budget's Office of Information and Regulation Affairs (OMB), hosted a Panel outreach meeting with SERs on December 19, 2013.

B1: Written Comments from Potential Small Entity Representatives following the 10/30/2013 Pre-panel Outreach Meeting

For the October 30 pre-panel outreach meeting, the following potential SERs submitted three sets of written comments, which are provided in this appendix:

- Todd Green, American Environmental Landfill
- Anne Germain, Environmental Industry Associations on behalf of Caroline County, Maryland
- Matt Stutz, Weaver Boos Consultants on behalf of Ponca City, Oklahoma



November 13, 2013

Lanelle Wiggins RFA/SBREFA Team Leader U.S. Environmental Protection Agency – Office of Policy (1806A) 1200 Pennsylvania Avenue, NW Washington, DC 20460

RE: Comments on New Source Performance Standards and Emissions Guidelines for Municipal Solid Waste Landfills

Dear Ms. Wiggins:

As a potential Small Entity Representative (SER) to the Small Business Advocacy Review (SBAR) panel, I am pleased to offer the following comments on the SBAR Pre-Panel Outreach Briefing on the New Source Performance Standards (NSPS) and Emission Guidelines (EG) for Municipal Solid Waste (MSW) Landfills.

General Comment

The cost burden for installing a landfill gas system is significantly greater for a small entity than for the larger landfills. Larger facilities enjoy economies of scale unavailable to smaller entities. For example, a significant cost can be simply to mobilize a drill rig. For a facility that installs many wells, the mobilization costs can be distributed over the costs of the wells. For smaller facilities with fewer wells, the individual well cost is greater. This example can be carried forward on almost every component of the landfill: from design, through permitting and construction, to monitoring and operations. Therefore, when considering the burden on small entities, the costs will be significant.

Specific Comments

- 1. Common control Common control establishes a disincentive for landfill gas to energy (LFGTE) projects. I am aware of major violations notices issued to landfill owners that were the direct result of the third party engineer owner and beyond the control of the landfill owner. As a highly regulated industry that is very sensitive to the goodwill of the public, being held responsible for the actions or inactions of an independent contractor is untenable. Therefore, in order to encourage LFGTE projects, it is important for permits to allow clear division of responsibilities between the landfill owner and the owner of the LFGTE facility.
- 2. Wellhead Performance Standards and Corrective Action The wellhead performance standards (oxygen, temperature and pressure) are overly prescriptive with extremely

complex monitoring requirements and attendant corrective actions. The standards for oxygen and temperature should be relaxed or eliminated. The current issues with the wellhead performance standards are further exacerbated if some of the options presented are implemented. In particular, if the 2 year/5 year rule were to be reduced to the suggested 1 year/3 year, the ability for facilities to comply with the wellhead performance standards would be further compromised.

Also, the prescriptive corrective action requirement for system expansion is generally unnecessary with active landfill facilities. Further, for a closed facility, this requirement would make no sense as landfill gas quality would be declining which might be the reason for the inability to comply with the wellhead performance standard.

Since the objective of the NSPS is to reduce LFG emissions, the performance criteria should be related to that objective rather than these standards that do not achieve this aim.

- 3. Closed landfills Based on our meeting, over 800 closed landfills could be impacted by the revised rule. Landfill gas at closed landfills is declining. As a result, additional relief from performance and monitoring should be granted to the closed landfills. In particular, the requirements to: a) operate for a minimum of 15 years the landfill might not have sufficient LFG to maintain an operation LFG collection system for that long; b) perform quarterly surface emissions monitoring (SEM); and c) meet the 5% oxygen wellhead standard. In addition, much of the LFG emissions might have oxidized as it traveled through the cover soils resulting in minimal pollution. Consideration should be available for oxidation of the LFG.
- 4. Surface Emissions Monitoring (SEM) At the meeting, the EPA suggested that they might propose a tighter grid for the SEM. It does not appear that there is any quantifiable environmental benefit that can be determined from increasing the spacing on monitoring. The rules already require that additional monitoring be performed at cracks in the cover or in areas where the vegetation is stressed. This requirement adequately locates surface emissions through the cover. SEM is a time-consuming compliance activity. Any tighter grid spacing requirement should be based on some demonstrable benefit to the environment.
- 5. LFG Collection System Installation Schedule The currently mandated 30 month for installation of the gas collection and control system is tight. If the EPA shortened it to 24 months, the assumption on the permitting should be shortened from six months to 4.5 months. In addition, the permitting timeframe should be prescriptive and facilities should not be penalized for regulatory delays.

Also, any compressed schedule is a very large burden. It requires installing the LFG collection system during active operations which subjects the collection system to damage from the operations – getting hit by trucks resulting in significant replacement costs. Also, there will be increased settlement of LFG piping which results in more operational troubleshooting and repairs.

- 6. Treatment Definition The treatment definition should not be modified. LFG collected and used beneficially should be granted the flexibility necessary to promote these projects without restrictively prescriptive requirements. A LFGTE project will treat the gas to meet the requirement of the proposed equipment in order to comply with the manufacturer's warranty.
- 7. EXCEL Spreadsheet Costs The costs shown in the spreadsheet seem low, especially considering that the facilities that would be impacted are significantly smaller and would not enjoy the same economies of scale.
 - Although the EPA explained that the costs assumptions assumed that many of the facilities would benefit from beneficial use such as in Massachusetts, this rationale does not seem to consider the size of the facilities. Most beneficial use projects are located at facilities that generate a significant volume of gas. Closed landfills are unlikely to provide gas for a long enough period to ensure a return on investment. Many smaller, active landfills do not generate sufficient gas to enjoy the opportunity to install beneficial use options. Even if they are able to, the cost benefits to the facility will be minimal. Occasionally, they might be in an ideal location adjacent to an industrial user where the benefit does exist. However, this is rare. Therefore, the costs will be significantly larger than the EPA has estimated. Lowering NSPS thresholds may also impact existing beneficial use projects that have benefited from being located at sites that are non-NSPS and therefore eligible for additional revenues.
- Operating LFG Systems with Diminishing Quantities of LFG The rule should be revised to allow for decommissioning of portions of the LFG system. It should make provisions for both temporary and permanent decommissioning based on site specific conditions.

Requests

- 1. In order to better evaluate the costs, it is requested that the EPA provide the following:
 - a. assumptions and figures used to develop the analysis;
 - b. information on the calculated emissions reductions including the background on assumptions;
 - c. any calculated environmental benefit;
 - d. anticipated tons of emissions that would be reduced and the assumptions associated with the costs to achieve this reduction; and,
 - e. any goals for emissions reductions; and,
 - f. any limits on the cost per ton to achieve the EPA's goals.

As a potential SER, I appreciate the opportunity to provide these comments and look forward to working with the EPA as the current NSPS rule is being reviewed. Should you have any questions, please contact me at agermain@envasns.org or 202-364-3724.

Very truly yours,

Anne M. Germain, P.W.

Director of Waste & Recycling Technology

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November 12, 2013

Lanelle Wiggins (via e-mail)
RFA/SBREFA Team Leader
U.S. Environmental Protection Agency – Office of Policy (1806A)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Comments on New Source Performance Standards and Emissions Guidelines for Municipal Solid Waste Landfills

Dear Ms. Wiggins:

As a Small Entity Representative for and on behalf of the City of Ponca City (City) located in Ponca City, Oklahoma, we are submitting the following comments to the EPA's anticipated proposed rule revisions to 40 CFR 60 Subpart WWW – New Source Performance Standards for Municipals Solid Waste Facilities (NSPS).

The City owns and operates the Ponca City Landfill (Landfill). As a small business entity and given that the potential financial burden to comply with a potentially more stringent NSPS, the City appreciates the opportunity to provide these pre-panel comments and to be a part of the rule revision process.

Currently the Landfill is not subject to the control requirements under the current NSPS rule and is not projected to exceed the current NMOC threshold for several more years. However, should the revised NSPS rules lower the emissions threshold, the site could be required to install and operate a landfill gas collection and control system (GCCS) in the next couple of years at a significant cost. Typically an initial GCCS costs about \$2 million. Once installed, the monitoring and reporting cost, under the current NSPS, is estimated to cost about \$50,000/year. The site would then need to expand the gas system every couple of years at a cost of approximately \$250,000 each event. In addition, there would also be associated costs for electrical usage to operate the blowers. To cover these additional costs there would most likely need to be an increase in the disposal rates charged to the citizens the Landfill serves. The City certainly understands the need for environmental controls, is willing to do what is required; however, there does not seem to be enough justification behind lowering the emissions thresholds. Given the substantial costs that a GCCS would impose on the Landfill and the desire to not increase disposal rates to its citizens, the City requests that EPA not reduce the current thresholds.

Although, the City is currently not subject to operating a GCCS under the requirement of the NSPS, the City would also request the EPA consider the following comments, which are taken from the list previously provided to the EPA as part of the pre-Panel list of questions.

- 1) Owner/operator definition As a landfill owner, the City does not want to be held responsible for the actions and/or the equipment of independent 3rd party entities. If by rule revision, the City could become liable for the actions of independent 3rd parties, the likelihood of the City pursuing a landfill gas-to-energy (LFGTE) project is very low. The City would not be willing to allow equipment they do not own and personnel they do not control to potentially put the City in a non-compliance situation. As such, this type of change in the rules would hurt the potential for a LFGTE project, which otherwise could be very viable, create jobs and reduce emissions. The City would support allowing a division of liabilities to be established between parties which could be provided to the regulating entity.
- 2) Treatment Definition There does not seem to be any need to change the definition of treatment. Any landfill gas that is collected and used for beneficial use should be allowed without prescriptive requirement. The LFGTE project will treat the gas to the needed conditions to be used by the proposed equipment. The LFGTE equipment, in most cases, will already have other environmental requirements placed on it. As such, placing requirements on the treatment process will only create a disincentive to do a LFGTE project. It is the LFGTE project that creates the real environmental benefit, not the treatment process, and as such, the treatment definition should not be changed.
- 3) Expanding Surface Emissions Monitoring (SEM) It does not appear that there is any substantial reasons for changing the current SEM requirements. As it was presented, there may be some other possible methods, but there does not appear to be any quantifiable results that would suggest the current requirements are not adequate or that another method would result in something better. If a true environmental benefit, with an appropriate cost/ton of emissions reductions could be provided, a change in SEM may be warranted. However, the cost benefit would need to be clearly defined before suggesting changes that would increase or expand the scope of SEM. As a general idea, the adoption of a method that is currently being used in only one part of the country, does not seem to be appropriate reason to make a global change to the SEM, unless it was part of other proposed changes in the rule that would be consistent with a more stringent SEM requirement.
- 4) Wellhead Performance Standards We would highly recommend that the EPA consider removing the wellhead performance standards. These very prescriptive standards are not warranted and create a very complex and onerous set of monitoring and remediation standards. The standards are not needed and in most cases the requirement to expand the GCCS will result in making operation of the GCCS worse and not better. The landfills are looking to maximize LFG collection; however, the current wellhead performance standards actually impede and/or hinder a site from being able to do so. The ultimate goal of the NSPS is to reduce surface emissions and that should be the only performance criteria. If site can meet the SEM requirements, the EPA should not be dictating what individual parameters need to be met at each wellhead for pressure, oxygen, and temperature. The monitoring and remediation of these parameters creates an undue level of

complexity in data tracking and regulatory correspondence that has no direct impact on reducing surface emissions.

- 5) EPA's target emission reduction goal and/or cost threshold As discussed on the conference call, it would be helpful to understand what the EPA's target emissions reduction is and/or the cost/ton threshold goal. In evaluating the proposed options, it is difficult to fully understand the effect and benefit of each one without knowing what the goal and/or objective is. As such, in order to provide meaningful comments on the proposed options, it is requested that EPA provide emission reduction and the cost/ton goals.
- 6) EPA options As stated above, without knowing the goals and objects we can only provide the following general comments.
 - a. <u>Lowering the design size threshold</u> A landfill with a design capacity of less than 2.5 million Mg and 2.5 million cubic meters is a very small landfill by today's standards and most likely would not be able to support the additional burden placed on it by more stringent NSPS requirements. By virtue, smaller landfills have less gas generation, less opportunity for gas-to-energy projects, and less emissions. As such, the design size threshold should not be changed.
 - b. Lowering the emission threshold Based on the information provided to this point, there does not seem to be any technical or scientific justification for a downward adjustment to the emissions threshold. Any downward adjustment would have a significant impact on the operations and costs for the City and all smaller landfill owners.
 - c. Shortening the time allowed for GCCS installation and shortening the time allowed for well field expansion Should the City's landfill be required under the NSPS to install a GCCS and then make routine expansions to the GCCS, the shortening of time would be very burdensome. The process of getting designs, permits, city council approvals, plus the time needed for advertisement, bidding, and construction, would be difficult under the current timeframes. Given the needed time to properly design, permit, bid, and construct a project, the shortening of timeframes for any site, especially a municipality, would create a hardship. In addition, requiring systems and components to be installed earlier will greatly increase the cost of operating and maintaining the system. Having to install components at a site early will greatly increase the need to have those components replaced in future. Placing GCCS components within the active working areas of a landfill is already an issue but then to require them to be installed even earlier will result in more well extensions and redrilling, which adds a significant cost.
- 7) EXCEL spreadsheet Given that the formulas or the background on how the numbers were created was not provided, the following are some general comments on the spreadsheet. As stated above, the cost for early installation needs to include the cost for additional repairs and needed replacements. It was stated that the costs were adjusted to account for beneficial use, but the methodology was not provided.

Lanelle Wiggins November 12, 2013 Page 4

The benefit of a LFGTE project is very site specific. Given changes in energy markets, tax laws, and regulations, some LFGTE projects make very little to no money. In many cases it is currently more economical to flare the gas than it is to install and operate a LFGTE project, and as such, it would not seem appropriate to apply a reduction in the cost of compliance. The assumption that a site could have a LFGTE project and that it could generate enough revenue to offset compliance costs cannot be applied across all sites. As a small business entity, the economies of scale may not allow the LFGTE project to be viable, but the cost of compliance will still be incurred. As stated throughout this letter, some of the proposed NSPS options would increase costs and thus reduce the viability of being able to do a LFGTE project at smaller sites.

Similar to the questions on how were the costs derived, we have questions about how NMOC reductions were calculated and would like to request additional information or understand how we might be able to assist with this evaluation.

The City understands the need for effective environmental controls and regulations. As a small business entity, the City looks forward to working with the EPA as the current NSPS rule is being reviewed, and appreciates the EPA's consideration of the issues presented in this letter.

Sincerely

Matt K. Stutz, P.E.,

Principal – LFG/Air Services

cc: David Horinek, City of Ponca City

American Environmental Landfill 212 N. 177th West Avenue Sand Springs, Oklahoma 74063

November 11, 2013

Ms. Lanelle Wiggins RFA/SBREFA Team Leader EPA Office of Policy 1200 Pennsylvania Avenue, NW Washington, DC 20460

Re: Comments on SBAR Pre-Panel Outreach Briefing

NSPS and EG for MSW Landfills American Environmental Landfill

Dear Ms. Wiggins

The American Environmental Landfill (AEL) is providing written comments in response to the Small Business Advocacy Review (SBAR) pre-panel outreach briefing held on October 30, 2013 for proposed changes to the New Source Performance Standards (NSPS) and Emission Guidelines (EG) for Municipal Solid Waste (MSW) Landfills. AEL has been selected as a potential Small Entity Representative (SER) to participate in the SBAR review panel process. AEL has considered the proposed changes discussed during the October 30, 2013 briefing and is writing to voice our comments about some of the proposed revisions. Provided herein is a brief background on AEL and our written comments.

FACILITY BACKGROUND

The AEL facility is an MSW landfill located in Sand Springs, Oklahoma, subject to the NSPS for MSW landfills. The landfill has a permitted design capacity of 12,350,000 megagrams (Mg) and encompasses approximately 222 acres, with approximately 182 acres permitted for waste disposal. The landfill consists of six disposal units including two active pre-Subtitle D disposal areas, three active Subtitle D disposal areas, and one closed Subtitle D disposal area.

A gas collection and control system (GCCS) was initially installed by Tulsa LFG, LLC (Tulsa LFG) in 2008 as part of a landfill gas (LFG) extraction and beneficial use project, in accordance with a Landfill Gas Rights, Lease and Development Agreement with AEL. In December 2009, the AEL reported facility emissions of nonmethane organic compounds (NMOCs) above 50 Mg per year, initiating the requirement to install and operate an NSPS compliant GCCS by May 2012. In 2010, Tulsa LFG submitted a construction permit application requesting authorization to install a landfill gas to energy plant consisting of a gas treatment process, where the LFG is compressed, chilled, and dehydrated; LFG fired electric generator sets, and supporting infrastructure at the AEL. The gas to energy plant was installed and began commercial operation in February 2013. Pursuant to the agreement between AEL and Tulsa LFG, Tulsa LFG is responsible for operation and maintenance of the GCCS, including compliance with NSPS and the applicable National Emission Standards for Hazardous Air

Pollutant (NESHAP) requirements. Compliance with the NSPS/NESHAPs was achieved in 2012 and continues through the present.

WRITTEN COMMENTS

As an MSW landfill currently subject to gas collection and control under NSPS, AEL is providing these comments, which focus on the proposed changes to NSPS that will affect the operation and compliance requirements of the GCCS. For clarification, we have included a summary of our understanding of the proposed changes with our responses immediately following in italics.

Owner/Operator Definition

EPA is considering three options for changes to the owner/operator definition:

- 1. Maintain current definition for a landfill owner/operator
- Provide option for a landfill owner/operator and gas system owner/operator with a mandatory requirement to define the compliance responsibilities
- Provide option for a landfill owner/operator and gas system owner/operator with a voluntary requirement to define the compliance responsibilities

AEL Comment

As an MSW landfill with a third party operating the GCCS, AEL supports the option to provide separate definitions for the landfill owner/operator and the gas system owner/operator and would furthermore support adding an additional definition for gas treatment system owner/operator. We prefer the option to include a mandatory division of compliance requirements. The GCCS at AEL is owned and operated by Tulsa LFG, therefore, AEL has little control over the operation of the equipment and does not want to be held responsible for the actions of Tulsa LFG. As such, AEL would prefer a division of liabilities be required under the NSPS to establish who will be responsible for compliance with the various portions of the NSPS.

Gas Treatment Definition

EPA is considering two options for changes to the gas treatment definition:

- Maintain the current definition of gas treatment, which is generally understood to include compression, chilling and dehydration of the LFG
- Incorporate numerical criteria for a system to qualify as gas treatment, such as a specific change in dew point, temperature, and filtration.

AEL Comment

The GCCS installed at the AEL incorporates a gas treatment system where the LFG is compressed, chilled, and dehydrated. The gas treatment system currently meets the definition of gas treatment as provided in guidance documents from the EPA; therefore, AEL is supportive of maintaining the existing definition. If the proposed changes to NSPS incorporate specific numerical criteria for the equipment to be classified as "gas

treatment", this would potentially require a modification/redesign of the existing equipment to achieve those levels. We would also have to install, maintain and operate continuous monitoring equipment to demonstrate these criteria are met during operation of the system. This would result in an increased compliance burden on the landfill.

In addition, the gas treatment system is not an emission point, but rather a physical process where the LFG is prepared for combustion in LFG fired generator sets. In the case of AEL, the LFG fired generator set is the ultimate point at which the LFG is vented to the atmosphere. The operation of the generator set in accordance with the applicable NSPS and NESHAP (in this case the RICE MACT and the NSPS for spark ignition engines), ensures that the appropriate reduction in emissions occurs. Specifying numerical criteria for equipment to qualify as gas treatment will not affect the resulting emissions from the generator sets. As such, incorporating numerical criteria into the proposed NSPS changes will be an increased burden with no measureable improvement in emissions.

Expanding Surface Emission Monitoring (SEM) Requirements

EPA is considering various options for expanding SEM requirements, including the following:

- 1. Changing the SEM pattern requirements; tighter pattern on a grid basis
- 2. Require both instantaneous sampling and integrated sampling
- 3. Incorporate restrictions on SEM monitoring during high wind and precipitation conditions

AEL Comment

AEL understands the rational for proposed restrictions on SEM events during high wind and precipitation conditions, which may reduce the effectiveness of monitoring, however, the rule language should allow for alternatives on a site specific basis. AEL does not currently understand the rational for changing the SEM pattern and requiring both an instantaneous and integrated monitoring requirement. Both of these changes, either by themselves or combined, will be an increased compliance burden on the landfill. Is there data to support that the current SEM monitoring requirements are not effective? Have areas that have implemented similar SEM requirements, such as California, seen a reduction in emissions from MSW landfills related to enhanced SEM? AEL would prefer to see data supporting the enhanced SEM program to justify the increase in resources and man-hours required to comply. If the expanded SEM program will not result in a reduction in emissions, why is EPA requiring this? AEL would also like to know if EPA is considering changing the instantaneous compliance threshold of 500 parts per million methane above background, and what compliance threshold EPA is considering for the integrated monitoring requirement.

Shorten Time for Wellfield Expansion

EPA is considering shortening the time allowed for wellfield expansion. The lowest time interval that has been considered is 1 year for closed areas or areas at final grade and 3 years for active areas.

AEL Comment

AEL has concerns with the potential decrease in time allowed for expansion of the wellfield. A reduction of the time allowed for expansion of the wellfield, particularly in active areas, could result in operational difficulties. Based on the annual quantity of waste received and the physical layout of the active area, it may be difficult to place a sufficient column of waste over a shorter time period in the affected areas for installation of gas extraction wells. Furthermore, during the first year or two after waste placement, it is likely portions of the waste will still be in the aerobic phase of LFG production when oxygen is available and carbon dioxide is the main gas produced. At this point in the LFG production process, complying with the operational standards of NSPS, specifically the oxygen and/or balance gas limitations, may be difficult. Gas collection from low producing areas will also cause a reduction in the gas quality, which will directly affect the ability to beneficially reuse the LFG in our current gas to energy facility and create more potential for subsurface fires.

Startup, Shutdown, Malfunction Changes

There was no discussion during the pre-panel briefing on proposed changes to startup, shutdown, and malfunction (SSM) requirements; however, there is a notation that EPA is proposing such changes in the briefing handouts.

AEL Comment

General Manager

AEL would like to know what changes EPA is proposing to the SSM requirements. AEL understands that there have been previous concerns over how the 1-hour control device shutdown limitation in NSPS has been interpreted. AEL has interpreted the 1-hour control device shutdown limit to imply a facility could not freely vent LFG after shutdown of a control device for more than 1 hour, but a control device being offline for more than on a hour is not a compliance issue as long as there is no free venting for more than an hour. Some state agencies and various regional offices have tried to interpret this limit to imply a control device could not be down for more than one hour even if free venting of LFG is not occurring. AEL believes this was not the intent of the rule language and would suggest the EPA add clarification to NSPS and/or remove the 1-hour control device shutdown limit.

We appreciate your consideration of these comments. If you have any questions, please feel free to contact myself at (918) 245-7786.