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HAROLD LEGGETT, Ph.D.  
SECRETARY

**State of Louisiana**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**ENVIRONMENTAL SERVICES**

December 15, 2008

«AddressBlock»

RE: Notification of Final Permit Actions  
Permit decisions (air and solid waste), Basis for Decision, and Responses to Significant Comments  
Waste Management of Louisiana, LLC- Woodside Landfill and Recycling Center  
Agency Interest (AI) No. 11767  
Livingston Parish

Dear Sir or Madam:

Thank you for your interest in the referenced matter. The Louisiana Department of Environmental Quality (LDEQ) has received and considered all public comments submitted regarding these permit actions. Please be advised that the actions were approved as follows:

Air	Part 70 Operating Permit	No. 1740-00025-V1	Issued	12/05/08
Solid Waste	Type I and II Landfill Permit Renewal	No. P-0080R2	Issued	12/05/08

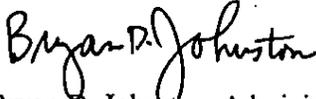
The Basis for Decision and the public comment response summary are attached; they address significant public comments regarding these permit actions. The permits and related documents are available for review at the LDEQ Public Records Center, Room 127, 602 North 5<sup>th</sup> Street, Baton Rouge, Louisiana. Viewing hours are from 8:00 a.m. to 4:30 p.m. Monday – Friday (except holidays). The documents are also available for review by accessing LDEQ's Electronic Document Management System (EDMS), the LDEQ's electronic repository of official records that have been created or received by LDEQ. Persons may search and retrieve documents stored in the EDMS via the LDEQ's web application at <http://edms.deq.louisiana.gov/app/doc/querydef.aspx>.

If you would like to obtain copies of these documents, you may request them from LDEQ Records Management at the North 5<sup>th</sup> Street location above, write Records Management at P.O. Box 4303, Baton Rouge, LA 70821-4303, or call (225) 219-3168. Your request will be processed pursuant to LDEQ procedures for public record requests, LAC 33:1.2301, *et seq.*, and a copy fee will be charged.

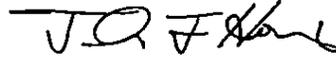
Pursuant to La. R.S. 30:2050.21, an aggrieved person may appeal devolutively a final permit action only to the Nineteenth Judicial District Court for the parish of East Baton Rouge. A petition for review must be filed in the district court within thirty days after notice of the action has been given.

If you have any questions, please contact Ms. Sonya Eastern of the Office of Environmental Services, Waste Permits Division, at (225) 219-3551 or Dr. Qingming Zhang of the Office of Environmental Services, Air Permits Division, at (225) 219-3044.

Sincerely,



Bryan D. Johnston, Administrator  
Air Permits Division



Thomas F. Harris, Administrator  
Waste Permits Division

Attachment

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL SERVICES

PUBLIC COMMENTS RESPONSE SUMMARY

PART 70 AIR OPERATING PERMIT NO. 1740-00025-V1  
AND  
TECHNICALLY COMPLETE  
SOLID WASTE PERMIT RENEWAL APPLICATION NO. P-0080R2

AGENCY INTEREST NO. 11767

WASTE MANAGEMENT OF LOUISIANA, L.L.C.  
WOODSIDE LANDFILL AND RECYCLING CENTER  
WALKER, LIVINGSTON PARISH, LOUISIANA

Notices of the draft permit decisions for the Woodside Landfill and Recycling Center (WLRC) concerning the air and solid waste permits prepared by the Louisiana Department of Environmental Quality (LDEQ) and requesting public comment and informing the public of the time and location of a public hearing were published in *The Advocate*, Baton Rouge, Louisiana, on February 14 and 16, 2008; and in the *Livingston Parish News*, Denham Springs, Louisiana, on February 14 and 17, 2008. The Public Notice was also mailed to concerned citizens listed in the Office of Environmental Services' Public Notice Mailing List on February 12, 2008. The public comment period closed on April 28, 2008. The LDEQ, Office of Environmental Services (OES) held a public hearing on Tuesday, March 25, 2008, beginning at 6:30 p.m. at the Livingston Parish Courthouse, Court Room #1, 20180 Iowa Street, Livingston, LA. The hearing and comment period afforded the public an opportunity to provide technical comments on the Technically Complete Solid Waste Permit Renewal Application, the proposed Part 70 Air Operating Permit, and the associated Environmental Assessment Statement (EAS).

The technically complete solid waste permit renewal application, air permit application, proposed air permit, statement of basis associated with the air permit, worksheet for technical review, and the EAS were available for review at the Livingston Parish President's Office, Livingston, LA, and at the Denham Springs-Walker Branch Library, Denham Springs, LA. The proposed air permit and the related Statement of Basis were also sent to the US-EPA Region 6.

The LDEQ received oral and written comments on the proposed permit decisions and the EAS during the public hearing and written comments during the public comment period.

The Air Permits Division and the Waste Permits Division each conducted a review of their respective permit applications and related submittals; each division prepared a proposed permit decision. For the public's convenience, the Office of Environmental Services coordinated the public participation activities for both proposed permits. Therefore, this Public Comments Response Summary document addresses issues common to both proposed permits, and, where applicable, separately addresses issues relevant to each of the proposed permits.

This document responds to pertinent statements (questions and/or comments) received regarding the impact of emissions on air quality, the impact of disposal of solid waste at the WRLC, and the Environmental Assessment Statement (EAS).

Because of the large number of comments, comments addressing the same issue from the public hearing transcript and the written comments have been grouped and summarized; comments which are quoted verbatim are identified, as appropriate. Documents containing the commenters' complete statements are located in EDMS.<sup>1</sup> References to these document locations are included in footnotes. The issues have been numbered in this document for reference.

The following statements, together with the Office of Environmental Services' responses, are relevant to the proposed Technically Complete Solid Waste Permit Renewal Application and the proposed Part 70 Air Operating Permit at issue here.

#### **ISSUE NO. 1**

*The rationale for this permitting action should be consistent in the permit, SB and public notice. Section III of the SB indicates that the permit will be a "reopened Part 70 operating permit", but the public notice and other parts of the permit and SB indicate that this is a permit revision. Part 70.7 and LAC 33:III.529 have specific requirements for the reopening of a Part 70 permit by the Agency. It appears that WLRC has also requested a revision to the initial Title V permit of December 2004. It is important for LDEQ to determine if a reopening of the permit is the warranted action based on the recent court decision to correct the deficiencies in this permit. Clarification and consistency on Federal regulatory requirements is requested in the permit, SB, and public notice.<sup>2</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 1**

Effective June 18, 2008, the original Part 70 Operating Permit (No. 1740-00025-V0) for Waste Management's WLRC was vacated by Louisiana First Circuit Court of Appeal. Consequently, this Part 70 operating permit will be a new permit for the facility. Wording changes to the permit and the Statement of Basis for the permit have been made to reflect this. Note that the permitting procedures for issuing a new Part 70 operating permit, as specified in LAC 33:III.519, have been followed for this permit.

#### **ISSUE NO. 2**

*The permit application and the permit issued in December 2004 had the potential to emit (PTE) for CO as 621.06 tons per year which is a major PSD source. The current permit includes a change from the emission factor used for landfill emissions (AP-42 Chapter 2.4) in the previous permit to an emission factor based on a one-time stack test. The applicant indicates that these emission factors are also used by other landfills. Landfill emissions vary in nature and with time, as indicated in the ETS March 19, 2004, report, having a wide variation of CO volumetric concentration, ranging from 10-20%. Predicting the quality and quantity of landfill gases over time and with changing composition of the solid waste is technically challenging. The EPA recognizes that the AP-42 landfill emission factors may be conservative; however, they represent the landfill*

<sup>1</sup> EDMS stands for Electronic Document Management System, the LDEQ's electronic repository of official records that have been created or received by LDEQ. Employees and members of the public can search and retrieve documents stored in the EDMS via this web application. (See <http://edms.deq.louisiana.gov/app/doc/querydef.aspx>).

<sup>2</sup> See EPA letter to LDEQ (EDMS Document No. 36831392)

*gases from a variety of landfill sources and wastes. It is therefore important that LDEQ provide a technical rationale for concluding that the emission factors it is proposing to use are replicable and are representative of the waste and gas production for the lifetime of this facility. The permit also includes a lateral extension where petroleum waste will be accepted. This new type of waste should also be considered when determining the gas composition and rates from the landfill.*<sup>3</sup>

**LDEQ RESPONSE TO ISSUE NO. 2**

CO emissions from the landfill are generated in two ways. One is directly from the anaerobic decompositions of landfill waste (CO as part of the landfill gas). The other is from burning the landfill gas in the flare (CO as a product of landfill gas combustion). The amount of CO generated directly from landfill waste is low as compared to the secondary CO emissions from the combustion of landfill gas in flare.

As indicated in Appendix 3 of Waste Management’s October 19, 2007, Part 70 operating permit application, the AP-42 default CO concentration (141 ppmv) was used to calculate CO amount in the landfill gas.<sup>4</sup> In addition, the potential landfill gas generation rate was calculated using EPA’s Landfill Gas Emission Model (LandGEM). The recommended AP-42 default values for k (0.04 yr<sup>-1</sup>) and L<sub>0</sub> (100 m<sup>3</sup>/Mg) were used in the calculation. The default LandGEM value for methane concentration (50% by volume) was also used for the calculation.

Permit No. 1740-00025-V0	Basis for Permit	Permit No. 1740-00025-V1	Basis for Revision
k = 0.05/yr	NSPS WWW Tier 1	k = 0.04/yr	AP-42 2.4
L <sub>0</sub> = 170	NSPS WWW Tier 1	L <sub>0</sub> = 100	AP-42 2.4

According to EPA guidance, the Tier 1 default values of k, L<sub>0</sub>, and C<sub>NMOC</sub> tend to overstate NMOC emission rates for most landfills and are intended to be used to indicate the need to install a collection and control system or perform a more detailed Tier 2 analysis. It is not recommended that these default values be used for estimating landfill emissions for purposes other than the NSPS and EG. AP-42 provides emission estimation procedures and default values that can be used for emissions inventories, NSR permitting, and other purposes.<sup>5</sup>

The different emission factor for CO emission calculations used in the 2007 application, as compared to that in the 2001 application, is that for landfill gas combustion in the flare. In the 2001 application, the CO emission factor for flares in AP-42, Section 2.4, Table 2.4-5, was used. As noted under the AP-42 table, the “test data” for this emission factor “were taken from enclosed flares.” The actual flare used at WLRC is an open utility flare (Model CF1230I10), supplied by LFG Specialties LLC. The flare vendor specified that CO emission factor for this flare is 0.37 lb/MM BTU. This emission factor corresponds to the CO emission factor for open flares given in AP-42 Supplement D, Table 13.5-1. LDEQ’s Office of Environmental Assessment, Environmental

<sup>3</sup> See EPA letter to LDEQ (EDMS Document No. 36831392)

<sup>4</sup> EDMS Document No. 36354673, pg. 90 of 198.

<sup>5</sup> Municipal Solid Waste Landfill New Source Performance Standards (NSPS) and Emission Guidelines (EG) – Questions and Answers, U.S. Environmental Protection Agency, pp. 19 and 22.

Technology Division also reviewed the supplemental information about the flare emissions submitted by Waste Management, dated December 7, 2007, and determined that the CO emission factor is acceptable for the flare at WLRC.

LDEQ also reviewed the CO factor selected and approved for other municipal solid waste landfills employing an open flare to combust landfill gas. The results are summarized in the following table. Note that the applications for these permits were prepared independently by various owners/operators and consulting firms and that none selected the CO factor from AP-42 2.4 as the most representative for their landfill.

AI	Landfill	Permit Number	CO Emission Factor	Comments
6961	Jefferson Parish Sanitary Landfill	1340-00140-V3	0.04491 (lb CO/hr)/ (dscf CH <sub>4</sub> /min)	Equals to 0.75 lb/MM Btu, assuming CH <sub>4</sub> heating value = 1000 Btu/dscf
12241	Magnolia	2160-00075-V2	370.0 lb/MM dscf CH <sub>4</sub>	Equals 0.37 lb/MM Btu assuming 1 scf = 1000 Btu
9077	Woolworth Road	0500-00038-V2	370.0 lb/MM dscf CH <sub>4</sub>	Equals 0.37 lb/MM Btu assuming 1 scf = 1000 Btu
4803	Colonial	0180-00035-V2	0.40 lb/MM Btu	Manufacturer's guarantee
85534	Webster Parish	3080-00211-V2	0.37 lb/MM Btu	Manufacturer's specification (LFG)
18935	Jefferson Davis	1360-00060-V0	0.37 lb/MM Btu	Manufacturer's specification (LFG)
32219	River Birch	1340-00223-V2	0.37 lb/MM Btu	AP-42, Table 13.5-1

Note also that the emissions factor rating for AP-42 13.5-1 ("B") is higher than that for AP-42 2.4-5 ("C").

Regarding the "lateral extension where petroleum waste will be accepted" and this "new type of waste," there is no new project, nor is there any change in landfill acreage or airspace associated with the air or solid waste permit. See the attached Basis for Decision, Section I.

### ISSUE NO. 3

*The Louisiana Appeals Court found that this permitting action involves a major modification. This permit application was revised several times with the last revision dated March 2, 2004, when Livingston Parish has been classified as a "severe" non-attainment for ozone and the Nitrogen Oxide waiver had been rescinded. The EPA maintains that the rules at the time of permit issuance apply to the permit and is supported by the definition of "Commence" as applied to construction of a major source or major modification in both Section 169(2)(A) of the Clean Air Act and 40 CFR 52.21(b)(8), 43 Federal Register 26404, as well as LAC 33:III.504. "Commence as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has ...." In this case, the WLRC did not have the necessary preconstruction permit and therefore is now obtaining this permit*

*applying all the currently applicable rules at the time of permit and other regulatory requirements for permits at the time of permit issuance, since these rules should have been anticipated by the permitting agency and the applicant.*<sup>6</sup>

**LDEQ RESPONSE TO ISSUE NO. 3**

Permit No. 1740-00025-V0, issued December 17, 2004, established limits for criteria pollutants, in tons per year (TPY), as follows:

Pollutant	Fugitive Landfill Gas	Landfill Gas Flare	Other Sources	Permit No. 1740-00025-V0
PM <sub>10</sub>	-	11.84	16.06	27.90
SO <sub>2</sub>	-	9.70	2.48	12.18
NO <sub>x</sub>	-	27.90	37.69	65.59
CO	4.26	522.80	94.00	621.06
VOC	21.36	0.40	16.13	37.89

Woodside has requested that the CO figure for the landfill gas flare be revised to 208.4 TPY (estimated PTE in 2038).

Prior to the installation of the flare, Woodside was not major source under the Nonattainment New Source Review (NNSR) or Prevention of Significant Deterioration (PSD) programs. Under both NNSR and PSD, a stationary source shall not be a "major stationary source" due to fugitive emissions, to the extent that they are quantifiable, *unless* the source belongs to any category in Table A in LAC 33:III.509 or any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act (CAA). Municipal solid waste (MSW) landfills do not fall into one of these categories.<sup>7</sup>

Thus, in order to trigger NSR at a stationary source not qualifying as a "major stationary source," a physical change (i.e., installation of the flare) would have to constitute a "major stationary source" by itself. The flare, *if permitted at the lower CO value*, would not have constituted a "major stationary source" at the time (emissions of PM<sub>10</sub>, SO<sub>2</sub>, and CO are less than 250 TPY; emissions of NO<sub>x</sub> and VOC are less than 50 TPY).

EPA's May 7, 2002, proposal to formally rescind the area's §182(f) and 182(b)(1) NO<sub>x</sub> exemptions was effective June 4, 2003 (68 FR 23597), and the Baton Rouge area was reclassified from a serious to a severe 1-hour ozone nonattainment area by operation of law on June 23, 2003 (68 FR 20077). Both events occurred *after* the Authorization to Construct/Approval to Operate (i.e., the "necessary

<sup>6</sup> See EPA letter to LDEQ (EDMS Document No. 36831392)

<sup>7</sup> Though the 1990 NSR Manual (pg. A-12) identifies "spraying, fabrication, waste disposal and insulting" [*sic*] of asbestos as an "affected facility" for a NESHAP promulgated prior to August 7, 1980 (40 CFR 61, Subpart M), MSW landfills were not being regulated under Section 111 or 112 of the Clean Air Act as of August 7, 1980. See "Air Emissions from Municipal Solid Waste Landfills – Background Information for Final Standards and Guidelines," EPA-453/R-94-021, December 1995 (pg. 2-181). This document is available at <http://www.epa.gov/ttn/atw/landfill/landflpg.html>.

preconstruction approval") for the gas collection and control system was issued on May 2, 2003 in accordance with LAC 33:III.501.C.3 and 511.<sup>8</sup>

Moreover, LAC 33:III.504.A.7 states that "[f]or applications deemed administratively complete in accordance with LAC 33:III.519.A prior to December 20, 2001, the requirements of this Section [§504] shall not apply to NO<sub>x</sub> increases." Waste Management's March 2001 Part 70 permit application was deemed administratively complete prior to December 20, 2001. The additional technical information dated March 27 and July 15, 2002, May 1 and September 8, 2003, and March 2, 2004 is not NO<sub>x</sub> emissions-related and did not affect the administrative completeness of March 2001 application. Therefore, the NO<sub>x</sub> increases proposed in March 2001 application are not subject to the requirements of LAC 33:III.504 (NNSR). LAC 33:III.504.A.7 is SIP-approved (see 40 CFR 52.970(c) and 67 FR 61270 (September 30, 2002)).

#### ISSUE NO. 4

*Waste Management installed a flare system to capture and burn landfill gases in 2003 and has used the system ever since. Woodside Landfill Part 70 Operating Permit, Air Permit Briefing Sheet, Pg. 1, October 2007. But instead of using data from the site's flare system to calculate actual emissions, Waste Management estimated its air emissions with the EPA Landfill Gas Emission Model ("LandGEM") and emission factors provided by the flare vendor, LFG Specialties, LLC, Woodside Landfill Part 70 Operating Permit, Air Permit Briefing Sheet, Pg. 2, October 2007; Miller Aff. ¶ 10.*

*Waste Management has already demonstrated that it is capable of collecting landfill gas composition and flow rate data needed to calculate actual emissions. In 2004, Waste Management ran a compliance test. The test results showed the flow rate at 32.54 ft/sec, Compliance Test, Landfill Flare, March 19, 2004, at 2-1, EDMS Doc. 36580609. This test also produced a gas composition report listing the percentages of notable pollutants and their respective weights, Compliance Test, Landfill Flare, March 19, 2004, Certificate of Analysis Number 2004030239-001A, EDMS Doc. 36580609.*

*Best engineering practices require LDEQ to use existing emission rates to establish accurate emission limits in the air permit. Ex. A, Miller Aff. ¶ 11. Even the LandGEM user's manual recognizes that the model numbers should be used to calculate emissions only "when site specific information is not available." Landfill Gas Emissions Model, Version 3.02 User's Guide, Amy Alexander, Clint Burklin, and Amanda Singleton, pg. 1, May 2005, available at [www.epa.gov/ttnca1/dir1/landgem-v302-guide.pdf](http://www.epa.gov/ttnca1/dir1/landgem-v302-guide.pdf), emphasis added. In this case, actual emissions data was not available only because LDEQ had not asked for it. LDEQ should have required Waste Management to collect new data showing the landfill gas composition and flow rate and then based permit limits on that actual emissions data. LDEQ could then used the LandGEM model and the flare vendor estimates to calculate a maximum emission estimate for the landfill in 2040. Ex. A, Miller Aff. ¶ 12.*

<sup>8</sup> EDMS Document No. 26795407

*It is particularly crucial for LDEQ to use actual emissions to set permit limits given the magnitude of the claimed emissions reduction and the timing of the purported reduction in relation to ongoing litigation about PSD review. The new emissions estimates purport to reduce Woodside Landfill's carbon monoxide emissions by 383 tons per year, just 12 tons per year shy of PSD review. That 12 tons per year margin between PSD review and no PSD review represents less than 2% of Woodside Landfill's estimated 621 tons per year of carbon monoxide emissions in 2004. Waste Management has not shown the sensitivity of its estimates, but if Waste Management underestimated any of the factors that the model uses to estimate emissions by a fraction, the actual emissions could be above PSD significant level. Given the level of public concern about this landfill and the estimated emissions' proximity to required PSD review, LDEQ should use actual emissions to set permit limits and should perform PSD review on the entire landfill.<sup>9</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 4**

Neither LDEQ nor Waste Management claims an emission reduction is associated with the revised Part 70 Permit. The permit simply reflects a recalculation of potential emissions.

In 2003, Waste Management installed a gas collection and control system (GCCS) at the Woodside Landfill and Recycling Center (WLRC). The sole purpose of installing this system is to reduce the landfill gas emissions from WLRC. The GCCS is an "active" landfill gas extraction/collection system, which routes the collected gas to a control device (flare). The active gas collection system consists of extraction wells, which are operated under slight vacuum such that gas preferentially migrates to the wells. This prevents, to a large extent, landfill gas migrating to and emitting from the surface of the landfill. The collected landfill gas is then routed to and burned by a flare.

In March 2004, Waste Management conducted a performance test on the flare to demonstrate compliance with the control device requirements of 40 CFR 60.18. The average gas exit velocity from the flare and the heating value of the landfill gas entering the flare were determined by the test and were in compliance with the requirements of 40 CFR 60.18. (See Emissions Compliance Tests, Woodside Landfill, Flare (Agency Interest #11767), March 19, 2004. EDMS Doc. No. 35256318.)

The Landfill Gas Emissions Model (LandGEM) is an automated estimation tool that can be used to estimate emission rates for total landfill gas, methane, carbon dioxide, nonmethane organic compounds, and individual air pollutants from municipal solid waste landfills. The average gas exit velocity from flare and the heating value of the landfill gas entering flare are not the parameters for estimating the emission rates mentioned above and are therefore not the input parameters for LandGEM. March 2004 testing measured the concentrations of the related compounds in the landfill gas, which are necessary for determining the heating value of the landfill gas. However, this test is not designed to accurately measure the concentrations of compounds with trace amounts in the landfill gas. More accurate results obtained by C-K Associates in 2000 or provided by EPA (AP-42) are used to calculate potential emissions of these compounds. (See Appendix 3 of Waste Management's Part 70 Operating Permit application, dated October 2007.) The default LandGEM

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<sup>9</sup> See J. Witkowski & H.Gaw (Tulane Environmental Law Clinic) letter to LDEQ (EDMS Document No. 36792115)

value for methane concentration (50% by volume) was used in the model. This default value is in close agreement with the measured methane concentration from the March 2004 testing.

It is important to note that the permit estimated the potential emissions, not actual emissions, as basis for determining applicability of federal and state regulations or other requirements. In addition, since PSD review is a project-specific requirement, it is worth noting that 237.73 tons per year CO emissions are site-wide potential emissions at WLRC. The potential CO emissions from the flare are only 208.51 tons per year. Regarding PSD applicability, see LDEQ Response to Issue No. 3.

#### ISSUE NO. 5

*Waste Management must monitor the landfill gas flow and composition in order to assure compliance with permits. Federal and state regulations require Woodside Landfill's air permit to contain "emission limitations and standards, including those operating requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance." La Admin. Code tit. 33, pt. III, §507, emphasis added; 40 C.F.R. 70.6(a)(1). Without monitoring the gas flow and composition, Waste Management cannot assure compliance with permit limits.*

*In the proposed air permit, LDEQ does not require Waste Management to continuously or periodically monitor landfill gas composition, even though Waste Management can only demonstrate compliance with permit limits if it knows landfill gas composition. Ex. A, Miller Aff. ¶ 13. Without gas composition monitors, Waste Management cannot identify which substances are being burned in the flare and what pollutants Waste Management is ultimately emitting. *Id.* Without gas flow rates, LDEQ cannot calculate the actual emissions from the flare system. Consequently, without continuously monitoring gas composition and flow rates, Waste Management cannot prove that it will be able to comply with its permit limits.*

*Part 70 Air permits must include regular monitoring, compliance certification and testing to assure compliance with the permit. Specifically, Louisiana regulations require each sufficient air permit to include "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to 40 C.F.R. 70.6(a)(3)(iii). La Admin. Code tit 33, pt. III, § 507.H.1.a. The draft permit does not require Waste Management to monitor the gas composition entering the flare system at the Woodside landfill. However, due to the fluctuating composition of landfill gas, Waste Management cannot know what pollutants it is emitting without monitoring gas composition as it enters the flare. See Ex. A, Miller Aff. ¶ 13. Without knowing exactly what pollutants it is emitting, Waste Management cannot assure compliance with permit limits. *Id.* Therefore, Waste Management must, at the very least, periodically monitor gas composition and flow entering the flare to assure compliance with permit limits.*

*Further, the "umbrella rule" requires that a Part 70 permit include a periodic monitoring, reporting and recordkeeping. Envtl. Integrity Project v. EPA, 386 U.S. App. D.C. 116 (D.C. Cir. 2005). The "umbrella" rule, 40 C.F.R. § 70.6(c)(1), arguably requires that each Title V permit contain, consistent with paragraph (a)(3) of this section [i.e., the "periodic monitoring" rule], compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with*

*the terms and conditions of the permit.” Envtl. Integrity Project v. EPA, 425 F.3d 992, 994-95 (D.C. Cir. 2005). When there is some periodic monitoring but it is not sufficient to assure compliance, the “umbrella rule’s ‘separate regulatory standard’ governs instead and requires case-by-case enhancement of existing monitoring ‘as necessary to be sufficient to assure compliance.’” Id. At 995. This umbrella rule assures that emissions comply with the air permits.*

*Without monitoring gas composition, Waste Management cannot prove that it is in compliance with permit limits. Ex. A, Miller Aff. ¶ 13. The proposed Part 70 air permit does not require Waste Management to monitor gas compliance. Further, the draft permit only requires Waste Management to monitor gas flow rates monthly. The proposed permit will violate federal requirements and not assure compliance without including regular monitoring in the current permit limitations. Therefore, Waste Management must regularly monitor the landfill gas composition entering the flare and the gas flow rate to assure compliance with its permit and comply with federal law.<sup>10</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 5**

The commenter notes that Part 70 permits must include monitoring requirements sufficient to assure compliance with the terms and conditions of the permit. LDEQ does not dispute this fact. However, contrary to the commenter’s assertions that the monitoring related to the landfill gas collection system is insufficient, the permit provides for monitoring in accordance with all applicable regulations.

40 CFR 70.6(a)(3)(i) requires each permit to contain “all monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements.” For Woodside, these requirements are codified at 40 CFR 60.753-756 of 40 CFR 60 Subpart WWW-Standards of Performance for Municipal Solid Waste Landfills.

With respect to the gas collection system, 40 CFR 60.753-756 require Woodside to monitor the:

1. gauge pressure at each individual well monthly (to ensure it is negative);
2. temperature in the interior of each wellhead monthly to ensure it is less than 55°C (to detect subsurface fires and show anaerobic decomposition is not inhibited);
3. nitrogen or oxygen concentration in the interior of each wellhead monthly to ensure the level is less than 20% or 5%, respectively (to detect whether excess air infiltration into the landfill is occurring);
4. methane concentrations at the surface of the landfill quarterly in accordance with a specified monitoring pattern (to ensure sufficient well density); and
5. cover integrity monthly.

With respect to the open flare, 40 CFR 60.756 requires Woodside to:

1. install a heat sensing device (e.g., a thermocouple) that indicates the continuous presence of a flame; and
2. install, calibrate, and maintain a gas flow rate measuring device that records flow to the control device at least every 15 minutes. Alternatively, the bypass line valve shall be

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<sup>10</sup>See J. Witkowski & H. Gaw (Tulane Environmental Law Clinic) letter to LDEQ (EDMS Document No. 3 6792115)

secured in a locked position with a car-seal or lock-and-key type configuration, and a visual inspection of the seal or closure mechanism shall be performed at least monthly.

The open flare must also comply with 40 CFR 60.18, which requires the flare to be operated with no visible emissions, except for periods not to exceed 5 minutes during any 2 consecutive hours; at all times when emissions may be vented to it; and within a set maximum tip velocity. The net heating value of the gas being combusted must also be 300 Btu/standard cubic foot (scf) or greater.

Proper operation of the collection and control system in accordance with the provisions of 40 CFR 60.753-756 ensures that the organic compounds in the landfill gas are indeed captured by the collection system, routed to the control device (open flare), and destroyed effectively.

Woodside must also keep up-to-date, readily accessible records for at least 5 years of the current amount of solid waste in place, the year-by-year waste acceptance rate, and the maximum expected gas generation flow rate. These records are also used to verify compliance with permit limits.

Because Woodside must comply with 40 CFR 60.753-756, EPA's "periodic monitoring rule" at 40 CFR 70.6(a)(3)(i)(B) does not apply. 40 CFR 70.6(a)(3)(i)(B) is applicable only when the "applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring)."

Central to the commenter's argument is whether additional monitoring can be established pursuant to 40 CFR 70.6(c)(1), sometimes referred to as the "umbrella monitoring rule."

EPA has also recently stated that the agency's position on the correct interpretation of 40 CFR 70.6(c)(1) is that this provision does not establish a separate regulatory standard or basis for requiring or authorizing review and enhancement of existing monitoring independent of any review and enhancement that may be required under other portions of the rules.<sup>11</sup> Instead, 40 CFR 70.6(c)(1) simply requires the permitting authority to include in Title V permits a number of elements (e.g., reporting, recordkeeping, compliance certifications) related to compliance; among these elements is the monitoring as specified in 40 CFR 70.6(a)(3) (i.e., monitoring defined by the applicable requirements and periodic monitoring, if needed).

LDEQ is aware of the August 19, 2008, decision of the U.S. Court of Appeals for the District of Columbia Circuit (*Sierra Club v. EPA*, No. 04-1243), although this decision is not yet binding (EPA may request a hearing *en banc* or appeal to the U.S. Supreme Court). Here, the Court found that 40 CFR 70.6(c)(1) ensures that all Title V permits include monitoring requirements "sufficient to assure compliance with the terms and conditions of the permit," even when 40 CFR 70.6(a)(3)(i)(A) and (B) are not applicable. Further, a permitting authority may supplement an inadequate monitoring requirement so that the requirement will "assure compliance with the permit terms and conditions."

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<sup>11</sup> 71 FR 75422 (December 15, 2006)

Importantly, the Court left “for another day the question of who wins when EPA and state and local permitting authorities conflict over whether a given requirement is sufficient ‘to assure compliance,’ because the question is not presented in this case.” (Maj. Op. at 11-12). Also, the dissenting opinion states that the “statute grants EPA the authority to determine whether state and local permitting authorities can impose additional monitoring requirements” (Dissenting Opinion at 2) and the “majority’s contrary decision is narrow and appears to allow state and local permitting authorities to add periodic monitoring requirements only in those cases where EPA itself concludes that the pre-existing applicable monitoring requirements are not adequate and EPA has taken no action” (Dissenting Opinion at 4, emphasis added).

Finally, the issue of periodic monitoring was central to the recent litigation concerning the WLRC. Neither the 19<sup>th</sup> Judicial District nor the Louisiana First Circuit Court of Appeals found that the original Title V permit was deficient in this regard.

#### ISSUE NO. 6

*Waste Management submitted incomplete data in the permit application’s emission inventory. Waste Management did not identify the landfill acreage that is currently routed to the gas collection system. Ex. A, Miller Aff. ¶ 14. The Louisiana Administrative Code requires applications for Part 70 Air Permits to provide information on the location and sized of each potential emission. La Admin. Code tit. 33, pt. III, § 517.D. 3.b. (“At a minimum, each permit application submitted under this Chapter shall contain the following: ... information regarding emissions from the source of all regulated air pollutants, including : a. the identity and location of each point of emissions: b. the size and height of the outlets of such emissions.”). Waste Management did not include acreage in the proposed air permit and used conflicting numbers in past applications. The 2004 permit application states that Woodside occupied 67 acres of a 488 acre parcel, with plans to occupy another 140 acres. Woodside Landfill Part 70 Operating Permit, Basis for Decision, pg. 3, December 17, 2004. Yet, the site’s annual waster report states that the landfill is approximately 100 acres. Semi-Annual Groundwater report, September 21, 2007, at 1. This report’s value still contradicts the 2005 solid waste permit which states that the Woodland (Woodside) Landfill operates on 192 acres of disposal land. Type I, IA, II. IIA Solid Waste Renewal Permit Application, Vol. I of V, January 2005, at A-1. Without such information, LDEQ cannot distinguish how many acres contribute to fugitive gases for the site. By failing to provide the required information, Waste Management violated Louisiana Code and therefore LDEQ must deny the proposed air permit.*

*The proposed air permit does not state how many acres are directly routed to the flare system. The Statement of Basis for the draft permit states that gas collection system consists of “extraction wells, which are operated under slight vacuum such that the gas preferentially migrates to the wells. This prevents... landfill gas migrating to and emitting from the surface of the landfill.” Woodside Landfill Part 70 Operating Permit, Statement of Basis, pg. 1, October 2007. Waste Management does not state how many acres from the 200+ acre site are routed to the flare. Without data on the acreage of the landfill included in the collection system, Waste Management cannot accurately estimate the yearly*

*emission the yearly emissions from the surface area of the landfill. Ex. A, Miller Aff. ¶ 15. LDEQ must deny the proposed air permit without the required acreage data. Ex. A, Miller Aff. ¶ 16.<sup>12</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 6**

Applicability of state and federal regulations and other permit requirements are determined based on the potential emissions, not actual emissions, from the source under consideration. As indicated in the Appendix 3 of Waste Management's Part 70 Operating Permit application, dated October 2007, the net waste disposal design capacity (41,410,552 cubic yards or 39,340,024 tons) has been used to estimate the potential emissions associated with landfill gas generated from WLRC. Note that landfill area is not a parameter (the designed landfill capacity is) for calculating the potential landfill gas generation rate.

Due to the nature of landfill operations, landfill gas generation rate changes with time. It is estimated that the maximum landfill gas generation rate (potential) at WLRC will occur in 2038. The current actual emission rates from WLRC are therefore lower than the potential emission rates estimated in this permit.

Regardless of the size of the landfill, Woodside is required to monitor the:

1. gauge pressure at each individual well monthly (to ensure it is negative);
2. temperature in the interior of each wellhead monthly to ensure it is less than 55°C (to detect subsurface fires and show anaerobic decomposition is not inhibited);
3. nitrogen or oxygen concentration in the interior of each wellhead monthly to ensure the level is less than 20% or 5%, respectively (to detect whether excess air infiltration into the landfill is occurring);
4. methane concentrations at the surface of the landfill quarterly in accordance with a specified monitoring pattern (to ensure sufficient well density); and
5. cover integrity monthly.

Additionally, Woodside's active gas collection system must:

1. collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been in place for a period of 5 years or more if active;
2. collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 2 years or more if closed or at final grade;
3. collect gas at a sufficient extraction rate; and
4. be designed to minimize off-site migration of subsurface gas.

Further clarification can be found in "Municipal Solid Waste Landfills, Volume 1: Summary of the Requirements for the New Source Performance Standards and Emission Guidelines for Municipal Solid Waste Landfills (EPA-453R/96-004)."

The disposal areas requiring control can be active, closed, or at final grade with no further waste to be deposited. Active areas requiring control are areas where the first

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<sup>12</sup> See J. Witkowski & H. Gaw (Tulane Environmental Law Clinic) letter to LDEQ (EDMS Document No. 36792115)

refuse deposited is five years or older. These areas must be controlled with the installation of a gas collection system, even though waste is still being actively deposited. After the initial installation of the collection system, owners and operators may need to expand the collection system as active areas in which the first waste deposited reaches the age of five years.

#### **ISSUE NO. 7**

*LDEQ should require Waste Management to regularly monitor emissions within the landfill site and at perimeter points to assure compliance with its proposed air permit, and state law. La Admin. Code tit. 33, pt. III, § 507.H.1.a. Waste Management built the flare system to siphon landfill gases from each area of the landfill where solid waste has been placed for a period of five or more years. The 2004 air permit states that acreage added to the landfill since 2004 would not be added to the gas collection and control system for the first five years after being filled. Woodside Landfill Part 70 Operating Permit Application, Statement of Basis, pg. 2-3, December 17, 2004, Landfill areas not routed to the flare will emit fugitive gases. To assure compliance with the proposed permit, and state air regulations, LDEQ should require regular ambient monitoring. Ex. A, Miller Aff. ¶ 20.*

*Further, ambient air monitors will provide much needed information to people living near the landfill, Waste Management could improve its relationship with Woodside Landfill's neighbors by installing monitors and providing the gathered information to the public.<sup>13</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 7**

The permit accounts for both the combustion of gas at the landfill flare and fugitive emissions of landfill gases that are not trapped by the gas collection system. Monitoring of fugitive methane emissions must be conducted on a routine basis. See LDEQ RESPONSE TO ISSUE NO. 6. Regarding the need for additional perimeter monitoring, see LDEQ Response to Issue No. 60.

#### **ISSUE NO. 8**

*The draft air permit allows Waste Management to emit pollutants, including ozone precursors, into the Livingston parish and greater Baton Rouge ambient air. Ex. A, Miller Aff. ¶ 19. These area were originally classified as severe 1-hour ozone nonattainment areas by operation of law on June 23, 2003. (68 FR 20077); Ex. A, Miller Aff. ¶ 18. However, due to regular failures to attain the national ambient air standard, the EPA created a new ozone classification system and placed Baton Rouge and Livingston Parish in an 8-hour moderate nonattainment area. 73 FR 15087. The Part 70 Permit will allow emissions of NO<sub>x</sub>, CO, and Volatile Organic Compounds (VOCs) into the Baton Rouge and Livingston nonattainment area. Woodside Landfill Part 70 Operating Permit, Air Permit Briefing Sheet, Pg. 2, October 2007. NO<sub>x</sub> and VOCs are precursors to ozone nonattainment. U.S. Environmental Protection Agency, Ground-Level Ozone, available at <http://www.epa.gov/air/ozonepollution/>. "Without monitoring, Waste Management will emit these ozone precursors in a nonattainment area unchecked." Ex. A, Miller Aff. ¶ 19. Because "states have considerable leeway in selecting the particular methods and programs they will use to achieve compliance with the national standards," *Env'tl. Def. v. EPA*, 369 F.3d 193, 197 (2d Cir. 2004),*

<sup>13</sup> See J. Witkowski & H. Gaw (Tulane Environmental Law Clinic) letter to LDEQ (EDMS Document No. 36792115)

*LDEQ should consider requiring alternatives and stricter limitations for ozone precursors in the Waste Management Proposed Part 70 Operating Air Permit.*

*Waste Management should use proactive methods of disposal and reuse at the Woodside Landfill. Waste Management has used green alternatives to combat gas emissions in other locations. At Waste Management's Altamont Landfill in Livermore, California, landfill gas is used to generate 9 megawatts of electric energy to power local homes. "Converting Landfill Gas to Energy," available at <http://www.wm.com/WM/ThinkGreen/RE/g2e.asp>. Waste Management has also created a program in Canada to recover and transport methane gas from its Sainte-Sophie Landfill to replace 75 percent of a local paper mill's natural gas usage. "Sainte-Sophie Landfill Gas Powers Paper Mill" available at <http://www.wm.com/VM/ThinkGreen/RE/saintesophie.asp>. Waste Management has also allowed its subsidiary, Wheelabrator Technologies Inc., to use trash as fuel to generate power through 17 waste-to-energy plants. "Converting Waste to Energy," available at <http://www.wm.com/WM/ThinkGreen/RE/g2e.asp>. Waste Management should adopt cutting edge technology here in order to limit its contribution to the Baton Rouge and Livingston Parish nonattainment areas.<sup>14</sup>*

**LDEQ RESPONSE TO ISSUE NO. 8**

*LDEQ's Basis for Decision, Waste Management of Louisiana, LLC, Woodside Landfill and Recycling Center provides a discussion of the comparison of permitted emissions from Permit Nos. 1740-00025-V0 and 1740-00025-V1. See the attached Basis for Decision document, Section I.B.*

As shown in the table, below, the proposed air permit reflects a net decrease in both NO<sub>x</sub> and VOC emissions, which are considered precursors to ozone formation.

<b>Permitted Emissions Rate in Tons Per Year</b>		
<b>Pollutant</b>	<b>Vacated Permit (No. 1740-00025-V0)</b>	<b>Proposed Permit (No. 1740-00025-V1)</b>
PM <sub>10</sub>	27.90	16.91
SO <sub>2</sub>	12.18	10.31
NO <sub>x</sub>	65.59	65.32
CO	621.06	237.73
VOC	37.89	34.27

The projects that convert landfill gas to energy would have positive energy impact and environmental impact. LDEQ encourages Waste Management to install such a project whenever it is feasible. However, there is no regulatory basis for LDEQ to require Waste Management to do so. Further, because gas to energy projects at landfills often employ internal combustion engines to

<sup>14</sup> See J. Witkowski & H. Gaw (Tulane Environmental Law Clinic) letter to LDEQ (EDMS Document No. 36792115)

generate electricity, such a project may actually result in an increase in NO<sub>x</sub> emissions locally, though they would be offset by a decrease in NO<sub>x</sub> emissions elsewhere due to decreased demand on electric utility units.

#### ISSUE NO. 9

*LDEQ must perform nonattainment new source review on Woodside Landfill because it is a significant source of NO<sub>x</sub> emissions. Woodside Landfill is not exempt from review because when LDEQ initially deemed the permit application administratively complete, the landfill's emissions had not yet triggered review. Louisiana's NO<sub>x</sub> grandfathering provision only applies to increases in applications deemed administratively complete prior to December 20, 2001. LA Admin. Code tit. 33 pt. III § 504.A.7. Waste Management sought to modify the permit application to increase Woodside Landfill's NO<sub>x</sub> emissions after December 20, 2001. Therefore, Woodside Landfill is subject to nonattainment new source review because of its NO<sub>x</sub> emissions.<sup>15</sup>*

#### LDEQ RESPONSE TO ISSUE NO. 9

See LDEQ Response to Issue No. 3.

#### ISSUE NO. 10

*The Louisiana Constitution provides that "[t]he natural resources of the state ... shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people." La. Const. Art. IX, § 1. The Supreme Court of Louisiana has recognized LDEQ's role as the "primary public trustee of natural resources and the environmental" in protecting this public interest in the state's natural resources. Save Ourselves, Inc. v. Louisiana Envtl. Control Cmm'n, 452 So. 2d 1152, 1157 (La. 1984). As trustee, before approving a proposed action, the administrator must determine that the adverse environmental impacts have been minimized or avoid as much as possible. Id. "In determining whether the proposed project fully minimizes adverse environmental effects, the commission necessarily must consider whether alternate projects, alternate sites, or mitigative measures would offer more protection for the environment than the project as proposed without unduly curtaining non-environmental benefits." Id.*

*As public trustee, LDEQ must consider the effects of landfill greenhouse gases on global warming and climate change, and consider alternatives to minimize or avoid their adverse environmental impacts. The Woodside Landfill releases greenhouse gases—NO<sub>x</sub>, CO and VOCs—into the atmosphere. Woodside Landfill Part 70 Operating Permit, Air Permit Briefing Sheet, Pg. 2, October 2007. These greenhouse gases contribute to global warming and climate change. The Pew Center on Global Climate Change documented the connection between greenhouse gases and climate change phenomena. "Pew Center for Climate Change" available at [www.pewcenter.org](http://www.pewcenter.org). Greenhouse gases contribute to sea rise and, more importantly for Louisiana, a 40% rise in tropical storm frequency in the North Atlantic. "Impacts: Facts and Figures" available at [http://www.pewclimate.org/global-warming-basics/facts\\_and\\_figures/impacts/](http://www.pewclimate.org/global-warming-basics/facts_and_figures/impacts/). Louisiana stands to suffer increased precipitation, water level rise and agriculture failures due to rising temperatures. As public trustee, LDEQ must consider these ramifications when reviewing Part 70 air permits.*

<sup>15</sup> See J. Witkowski & H. Gaw (Tulane Environmental Law Clinic) letter to LDEQ (EDMS Document No. 36792115)

*Therefore, LDEQ should require Waste Management to consider proactive alternatives to reduce its footprint on global warming and climate change.<sup>16</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 10**

The LDEQ has conducted a review of all application-related materials, including the EAS and responses to the "IT Questions" and has not found them to be inaccurate or inadequate. Waste Management has provided all information as requested by the LDEQ and as required as part of the permit decision process. Details of the analysis of *Avoidance of Adverse Environmental Effects* are presented in the attached *Basis for Decision* Section VII. Note there is no project associated with either the air or solid waste permit.

LDEQ recognizes the importance of addressing the global challenge of climate change, and in light of the Supreme Court's decision in *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), EPA is working to develop an overall strategy for addressing the emissions of CO<sub>2</sub> and other greenhouse gases under the Clean Air Act. EPA is taking the first steps toward regulating greenhouse gas emissions from mobile sources, but EPA has not yet issued regulations requiring control of CO<sub>2</sub> emissions.

#### **ISSUE NO. 11**

*The Vacuum Heap/pile process, which Waste Management is proposing will still allow emissions to escape and result in increased noxious odors and toxic chemical emissions to be released into the air. If the process is not conducted in a sealed building, the emissions will still escape from the contaminated soil piles during the operation of the recycling aeration process.*

*The air emissions will be excessive when the contaminated soil is placed on the landfill heap for storage and when the contaminated soil is placed on top of the landfill surface during construction of the waste piles. There will be no mechanisms in place to control or reduce the toxic emissions during waste pile construction.*

*The heating of the system, required to optimize micro-organism growth (Heating the pile during the winter months is a must!!) will also drive the volatile organics into the air and result in toxic chemical emissions.*

*The primary contaminants in the soil are volatile and semi-volatile organic chemicals. When the system is operated with the air exhaust diverted to the exhaust stack, the emissions will be treated with carbon absorption. The emissions through the carbon absorption unit will allow increased pounds of VOCs per year. Since the process will normally be operated without diverting through the stack, the bioremediation process will have much higher toxic emissions.<sup>17</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 11**

The Vacuum Heap Bioremediation System utilizes microorganisms for aerobic degradation of petroleum hydrocarbon contaminants from constructed piles of contaminated soil. The

<sup>16</sup> See J. Witkowski & H. Gaw (Tulane Environmental Law Clinic) letter to LDEQ (EDMS Document No. 36792115)

<sup>17</sup> See K. Benton letter on behalf of Concerned Citizens of Livingston Parish (CCLP) to LDEQ (EDMS Document No. 36771007)

bioremediation process typically requires 14 to 42 days to achieve the acceptable level of decontamination of the soil. Once the soil meets the acceptable level of decontamination, the soil piles will be deconstructed and the decontaminated soil can be utilized for landfill construction activities.

The microorganisms decompose the hydrocarbon pollutants from the petroleum-contaminated soil by using oxygen from the air and the petroleum contaminants as a nutrient source, converting the petroleum substances to carbon dioxide, water, inorganic salts, and small amounts of harmless organic material. The two factors that affect the decomposition process are the ambient air temperature and soil type.

Operation of the Vacuum Heap Bioremediation System begins with redistribution of the hydrocarbon-contaminated soil into lifts, using earthmoving equipment such as excavators or bulldozers. The contaminated soil will then be mixed and irrigated with nutrients and microorganisms grown in batch cultures. Perforated piping will then be installed in the lifts of soil and connected by manifolds to a blower/vacuum system. By using a vacuum system to recycle air through the perforated pipes, air can be uniformly circulated through the soil to provide oxygen for the microorganisms' aerobic decomposition.

Because the primary contaminants are petroleum-based hydrocarbons, volatilization of the hydrocarbon-contaminants will be controlled by keeping the soil moist and covering all contaminated soil, not undergoing construction or deconstruction activities, with 6 inches of previously decontaminated soil to minimize air emissions, moisture evaporation, loss of passive solar heat, and to prevent contaminated run-off from storm-water during rain storms. The perforated piping will also allow for the routine addition of nutrients for the microorganisms and water; enough water will be added to moisten the soil without creating a runoff. Routine system maintenance of the Vacuum Heap Bioremediation System will include moisture measurements, temperature monitoring, blower equipment servicing, and cleaning of the vacuum traps.

Normal operation of the Vacuum Heap Bioremediation System requires 100 percent recycle of the extracted air, which results in zero air emissions from the process. A standby vapor-phase carbon absorption emission control system will be provided for temporary exhaust to the atmosphere as needed.

Woodside's operating permit allows the use of contaminated soil as daily cover, provided the soil meets the performance and aesthetic criteria. An industrial solid waste stream which has been accepted by Woodside Landfill for disposal and which is capable of providing the characteristics of soil cover may be utilized for daily and interim cover. All waste streams used as cover material will have undergone the pre-disposal approval process as described in the "Quality Assurance and Quality Control Plan for Waste Acceptance"; this process includes chemical analysis and a multi-stage acceptance procedure. Waste streams which are highly odorous, erode easily, and which may attract flies and other vectors cannot be used as a source of cover material.

The primary concerns regarding air quality are the emissions of methane gas and other noxious and/or odor-producing gases resulting from decaying organic matter. The requirements set forth in LAC 33:VII.521.F.3 and 711.B.2 help to control the degradation of air quality. The facility addresses and meets these requirements. As part of the requirements, daily cover will be applied over the working face of the landfill to reduce noxious odors by minimizing outward movement of methane and other gases. In addition, the facility has in place a Comprehensive Air Monitoring Plan/System as part of the existing permit (P-0080R1).

Emissions from the referenced process are not significant as suggested by the commenter. Analytical data indicates that the primary pollutant in the bioremediation material is benzene. (See Appendix 3 of Waste Management's application.) Air emissions from the Vacuum Heap Bioremediation operations will be controlled through profiling and analysis of each incoming waste stream for TAPs (Toxic Air Pollutants)/HAPs (Hazardous Air Pollutants) and other VOCs. A maximum of 104,154 tons of material for bioremediation may be accepted annually. Actual acceptance quantities will be adjusted down in accordance with the benzene concentration of the bioremediation material. The annual benzene emissions from the Bioremediation operations are limited to no more than the minimum emission rate (MER) of 260 pounds per year (0.13 tons per year). By conservative estimation, the total VOC emissions (including TAPs/HAPs) from the Vacuum Heap Bioremediation operations, including bioremediation waste handling operations, will be less than 1 ton per year.

#### **ISSUE NO. 12**

*Gases from the landfill are being processed through a simple flare and everyone downwind of the landfill is effectively being gassed. The odor from the process is at times unbearable and always offensive. No one knows with certainty what is being processed through this flare. There is a better way to manage the gasses created by the landfill. Waste Management will not do this unless they are forced to.*<sup>18</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 12**

WLRC is required to operate a Gas Collection and Control System (GCCS) to control landfill gas emissions in accordance with the Standards of Performance for Municipal Solid Waste Landfills (NSPS Subpart WWW). The GCCS consists of an "active" landfill gas extraction/collection system, which routes the collected gas to a control device (flare).

The requirements of the Part 70 Operating Permit meet or exceed standards set by the EPA and the LDEQ to protect human health and the environment. The permits for WLRC require that the emissions be controlled to meet or exceed the requirements of all applicable regulations and defined permit conditions. The permitted emissions from the project are based on conservative engineering design calculations and approved emission factors. The application details the emission calculations and state and federal regulatory requirements for the air emission sources.

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<sup>18</sup> See S. McCaskill letter with Madison Oaks subdivision residents' petition to LDEQ (EDMS Document No. 36792113)

As modeled, the LDEQ finds that WLRCs permit will meet or exceed the requirements of the primary and secondary National Ambient Air Quality Standards (NAAQS) and Louisiana Ambient Air Standards (AAS).

While burning the landfill gas in the flare, a CO is produced. The estimated potential (maximum) CO emissions from this landfill site are 237.73 tons per year. LDEQ has performed a modeling analysis on CO's impact on the air quality with an EPA-approved dispersion model, AERMOD. The modeling results show that the maximum 1-hour average and 8-hour average of CO concentration at ground level around the landfill site are 3,280.27  $\mu\text{g}/\text{m}^3$  and 1,465.61  $\mu\text{g}/\text{m}^3$ , respectively. These concentrations are well below the National Ambient Air Quality Standards for CO (40,000  $\mu\text{g}/\text{m}^3$  and 10,000  $\mu\text{g}/\text{m}^3$ , respectively). These standards (primary standards for CO) are intended to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

With respect to the open flare, 40 CFR 60.756 requires Woodside to install a heat sensing device (e.g., a thermocouple) that indicates the continuous presence of a flame; and install, calibrate, and maintain a gas flow rate measuring device that records flow to the control device at least every 15 minutes. Alternatively, the bypass line valve shall be secured in a locked position with a car-seal or lock-and-key type configuration, and a visual inspection of the seal or closure mechanism shall be performed at least monthly.

The open flare must also comply with 40 CFR 60.18, which requires the flare to be operated with no visible emissions, except for periods not to exceed 5 minutes during any 2 consecutive hours; at all times when emissions may be vented to it; and within a set maximum tip velocity. The net heating value of the gas being combusted must also be 300 Btu/standard cubic foot (scf) or greater.

Proper operation of the collection and control system in accordance with the provisions of 40 CFR 60.753-756 ensures that the organic compounds in the landfill gas are indeed captured by the collection system, routed to the control device (open flare), and destroyed effectively.

With regard to health effects, see LDEQ Response to Issue No. 13.

#### **ISSUE NO. 13**

*We should probably be staying indoors not only because of the smell but because of the air emissions from the facility. Below is a list of the health hazards that the emissions could cause from exposure:*

- 1. VOC is a broad based term for air pollution that can cause soil, groundwater and air pollution. It has been known to produce air quality issues like sick building syndrome and also contributes to global warming.*
- 2. CO is colorless and odorless toxic gas but can cause severe health problems such as damage to the central nervous system and the heart. It will have significant impact on unborn children if the mother comes in contact with it. Carbon monoxide was actually used in the gas chambers during the Holocaust.*

3. *NO<sub>x</sub>. In 1977 the Kayoto Protocol [Kyoto Protocol] called for a substantial world wide reduction of NO because it produces greenhouse gases and therefore increase global warming.*
4. *SO<sub>2</sub> acts as an acid and can cause breathing problems, coughing and sore throat if inhaled. It can cause permanent pulmonary damage and when combined with NO can cause "Acid Rain."*
5. *PM<sub>10</sub> when inhaled causes asthma, lung cancer, cardiovascular issues and premature death. PM<sub>10</sub> can settle in the bronchi and lungs and cause health problems. Researchers suggest that even short-term exposure at elevated concentrations could significantly contribute to heart disease. PM pollution is estimated to cause 22,000 to 52,000 deaths per year in the US.<sup>19</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 13**

WLRC is a municipal solid waste landfill. The most significant source of emission from a landfill is the landfill gas. Methane (CH<sub>4</sub>) and CO<sub>2</sub> are the primary constituents of landfill gas and are produced by microorganisms within the landfill under anaerobic conditions. Landfill gas also contains other compounds. The concentrations of these compounds are generally very low. Typical concentrations for landfill gas constituents can be found in AP-42, Section 2.4, Table 2.4-1.

The Clean Air Act (Act) required the Environmental Protection Agency (EPA) to establish health-based National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Act established two types of national air quality standards. *Primary standards* are set to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. *Secondary standards* are set to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. According to EPA, air quality that adheres to such standards is protective of public health, animals, soils, and vegetation.

As described in LDEQ Response to Issue No. 12, modeling results show that the maximum predicted ground level concentrations of CO emissions from the WLRC will be below its national ambient air quality standards (NAAQS) and will not cause air quality impacts which would adversely affect human health or the environment. Based on the magnitude of permitted emissions, LDEQ did not require WLRC to model PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub>; however, these emissions were reviewed by the Office of Environmental Assessment, Air Quality Assessment Division in order to ensure compliance with the NAAQS for these pollutants.

At the state level, Louisiana has established Ambient Air Standards (AAS) for a group of compounds known as Toxic Air Pollutants (TAP). TAPs include the federally-regulated Hazardous Air Pollutants (HAP), as well as a handful of other compounds such as ammonia and hydrogen

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<sup>19</sup> See D. Arledge letter to LDEQ (EDMS Document No. 36736723)

sulfide. Based on the modeling results, the impact of TAP emissions will also be below their respective AAS established by LAC 33:III.Chapter 51.

A summary of the TAP modeling results follows. The ISCS3 model was used.

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
1,1,2,2-Tetrachloroethane	Annual	0.54 $\mu\text{g}/\text{m}^3$	1.70 $\mu\text{g}/\text{m}^3$
Acrylonitrile	Annual	1.26 $\mu\text{g}/\text{m}^3$	1.47 $\mu\text{g}/\text{m}^3$
Chlorobenzene	8-hour	17.13 $\mu\text{g}/\text{m}^3$	1,100.00 $\mu\text{g}/\text{m}^3$

The emissions from the landfill are not expected to cause air quality impacts that would adversely affect human health or the environment in Livingston Parish and surrounding parishes.

**ISSUE NO. 14**

*Waste Management has been able to conveniently submit a permit (application) with significant drop levels of emissions, but with no new controls or scientific values to support those drops. The First Circuit Appeals vacated the original Woodside permit, because there were high levels of carbon monoxide emissions. The court required a PSD review to make sure that the air around the facility was not to worsen, to protect the community. Rather than gleam this PSD review, Waste Management resubmitted a new application, and suddenly this new permit with no new controls, miraculously dropped the carbon monoxide levels below the PSD standard. From the 2004 permit application to the current permit application, Waste Management managed to drop the expected carbon monoxide tons per year by 400, simultaneously, while doubling the size of the landfill. The numbers don't seem to make any sense. These numbers are not dropped due to controls or due to buffers, they are dropped, purely, because of math. The permit uses standards from the manufacturer of the landfill flare to calculate the gas emission levels, not the gas control numbers available on site.<sup>20</sup>*

**LDEQ RESPONSE TO ISSUE NO. 14**

Neither LDEQ nor Waste Management claims an emission reduction is associated with the revised Part 70 Permit. The permit simply reflects a recalculation of potential emissions. For a more detailed explanation, see LDEQ RESPONSE TO ISSUE NO. 2.

The First Circuit Court of Appeals did not vacate the permit due to high CO emissions, nor did the Court "require" a PSD review. LDEQ approved a Pollution Control Project (PCP) exemption for

<sup>20</sup> See H. Gaw statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

Woodside in 2003 in accordance with a 1994 guidance document published by the EPA. EPA later promulgated this guidance document on December 31, 2002, as part of its initial NSR Reform rulemaking package. In 2003, Woodside installed a flare to control emissions from the landfill. The flare resulting in a PSD-significant increase in CO emissions (based on the CO factor from AP-42 2.4), but the net effect of the project was environmentally beneficial. The flare greatly reduced the more "toxic" organic compounds generated in the landfill. The PCP exemption allowed the facility to avoid the BACT and permitting aspects of the PSD program, but not its modeling and public participation requirements. The First Circuit vacated Woodside's permit because LDEQ had not yet formally adopted EPA's NSR Reform rules, stating that "such a change in the regulatory law could only be effected through proper rule-making procedures." Further, on June 24, 2005, the U.S. Court of Appeals for the D.C. Circuit (*State of New York v. EPA*, No. 02-1387) vacated EPA's PCP provisions. As such, LDEQ did not move forward with a final rule.

Moreover, LDEQ maintains that good combustion practices are Best Available Control Technology (BACT) for CO emissions from an open flare combusting landfill gas. It is likely that a full PSD review would not have required a reduction in CO emissions. However, by reducing CO limits, Waste Management must comply with a more stringent limit and would be liable for excess emissions should future testing reveal that CO emissions exceed permit limits.

#### ISSUE NO. 15

*We are surrounded by the landfill on three sides. We are concerned about the water that now flows south to a ditch when it rains. Our water well is involved with the ditch.*

*I am concerned about polluted water. There is a culvert running north and south. Not only are we getting pollutants from the air, we got water coming up on top of us now.*

*I am concerned for what it (the landfill) will do in the future to our water, and what about the land around it?* <sup>21, 22, 23</sup>

#### LDEQ RESPONSE TO ISSUE NO. 15

The WLRC's design includes features to prevent contaminated stormwater from entering surface waters. Please see the attached *Basis for Decision* Section VII for a detailed discussion of the issue.

The WLRC is also currently permitted for its water discharges under the Louisiana Pollutant Discharge Elimination System (LPDES).<sup>24</sup>

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<sup>21</sup> See H. Breaud, D. Breaud, S. Breaud, L. Sibley, G. Sibley letter to LDEQ (EDMS Document No. 36365228)

<sup>22</sup> See H. Braud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>23</sup> See S. Bethune statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>24</sup> LPDES Permit No. LA0100200

**ISSUE NO. 16**

*We used to smell the landfill only during the winter months, but now we smell it most of the time. The wind used to play a big part of the smell, but now it doesn't really matter which way the wind is blowing. I don't think it is fair for our neighborhood that we have to put up with the horrible chemical smell.*

*As a neighbor to the east of the facility, I can attest to the fact that the odor is often unbearable. We are forced to stay indoors while other south Louisiana residents are able to enjoy the great outdoors.*

*The smell gets into our homes and sometimes we have to leave our homes.*

*We smell it mostly late at night.*

*Sometimes we cannot sit in our own backyard because of the awful odor coming from this landfill. It is almost always that of a foul burnt smell. I understand that there is some sort of a flaring process that takes place at the landfill, and I do not know if this contributes to the problem or not. Sometimes the odors are really nauseating. It is extremely frustrating.*

*Over the past 5 days I have been affected by the nauseous odor of the landfill, mostly in the early morning around 6:00 to 7:00 a.m. The odor problem has gotten worse over the past 5 of the 15 years that I have lived here.*

*It is a terrible thing to have to live behind it (the landfill). When you live with a smell 24/7, it's not right.*

*It was stated that a landfill smells. We know it smells.*

*I have made numerous complaints about the odors coming from Woodside Landfill. It has sometimes been nauseating.*

*I'm against anything that is going to bring more smells into our community.*

*I live directly behind the landfill. There is an odor. I don't know what it is. I was assured it would decrease over time with the addition of new equipment, but it hasn't. DEQ should address this odor problem.*

*We need somebody we can trust to go in there and find out what is being put there. Help us not have to smell what we're smelling. I hope DEQ will take a stand and come investigate when we call you and stop what the smell is. At least help us find out if it is poisoning everybody out here.* <sup>25, 26, 27, 28, 29, 30, 31, 32, 33, 34</sup>

<sup>25</sup> See H. Breaud, D Breaud, S. Breaud, L Sibley, G. Sibley letter to LDEQ (EDMS Document No. 36365228)

<sup>26</sup> See D. Arledge letter to LDEQ (EDMS Document No. 36736723)

<sup>27</sup> See S. McCaskill letter to LDEQ (EDMS Document No. 36365202)

#### **LDEQ RESPONSE TO ISSUE NO. 16**

The WLRC's design and operational practices includes features to control odors. Please see the attached *Basis for Decision* Section VI for more discussion of this issue. The issue of the possible health effects of emissions is discussed in LDEQ RESPONSE TO ISSUE NO. 13.

#### **ISSUE NO. 17**

*I don't think it is fair for our neighborhood that we have to put up with the noise from the landfill, which is non-stop at times.*<sup>35</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 17**

The Department currently has no regulations governing noise pollution control. However, the proposed permits do not authorize the WLRC to supersede local ordinances on noise pollution. The Livingston Parish Council has enacted ordinances regarding noise.<sup>36</sup> The parish has the authority to enforce compliance with the requirements of the Livingston Parish Ordinances on noise pollution. Therefore, any questions regarding noise should be directed to WLRC and/or the Livingston Parish Government.

#### **ISSUE NO. 18**

*I am dissatisfied with LDEQ's response to our complaints. When we call, they call us back at their convenience. Sometimes we don't get a call back until a few days later. By that time, they say they detect no odor. Maybe it is not smelling as much that day.*

*I reported an experience to LDEQ that, according to my physician, I had experienced bronchial spasms and chemical burn due to toxic exposure, and the LDEQ enforcement staff member never got back in touch with me, even though he stated he would do so.*

*We request that LDEQ respond to our complaints in a timely manner.*

*We ask that the citizens be once again informed of the complaint process.*

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<sup>28</sup> See F. Roule email to LDEQ (EDMS Document No. 36689390)

<sup>29</sup> See H. Braud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>30</sup> See D. Broussard statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>31</sup> See S. Bethune statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>32</sup> See C. Carter statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>33</sup> See M. Mistic statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>34</sup> See C. Carter statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>35</sup> See H. Breaud, D. Breaud, S. Breaud, L. Sibley, G. Sibley letter to LDEQ (EDMS Document No. 36365228)

<sup>36</sup> See Livingston Parish Council Code of Ordinances, Article II, Sections 5-11 through 5-16  
[http://www.municode.com/resources/code\\_list.asp?stateID=18](http://www.municode.com/resources/code_list.asp?stateID=18).

*The response time is zero now. We call DEQ. We have no answer.*

*A lot of these air complaints are answered between one to ten days later. We need better investigations and better response time to our complaints.*

*DEQ's not going to help you. I've called several times. Once I called with a complaint about a smell; they didn't come for three or four hours.*<sup>37,38,39,40,41,42</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 18**

According to Standard Operating Procedure SOP\_1295\_R03, the Surveillance Division investigator will ensure that the investigation is initiated as the applied priority requires, but in no case later than five working days of the date of notification to the Department. Potential emergency situations must be investigated immediately. High priority situations will be addressed within two days. Moderate or low priority situations will include phone contact with the complainant within five working days. The complainant will be contacted and verbally informed of the investigation findings within 20 working days of initiating the investigation or within 7 working days of closure of the incident.

#### **ISSUE NO. 19**

*Please help us if you have the power to do so. These people (Woodside) are ruining our livelihood.*<sup>43</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 19**

The commenter's specific concern or issue is unclear. However, it seems to refer to the landfill's impact on citizens' ability to work and live in the community. The Louisiana constitution does not establish environmental protection as an exclusive goal, but instead, requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social, and other factors. Please see the attached *Basis for Decision* Section VIII for a detailed discussion of this issue.

Please see LDEQ RESPONSE TO ISSUE NO. 13 regarding the health effects of the permitted emission limits.

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<sup>37</sup> See H. Breaud, D Breaud, S. Breaud, L Sibley, G. Sibley letter to LDEQ (EDMS Document No. 36365228)

<sup>38</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>39</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>40</sup> See H. Breaud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>41</sup> See O. Couvillion statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>42</sup> See C. Carter statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>43</sup> See H. Breaud, D Breaud, S. Breaud, L Sibley, G. Sibley letter to LDEQ (EDMS Document No. 36365228)

## ISSUE NO. 20

*This landfill is simply too active to be so near to a populated area.*

*Beginning in the mid-90's, Concerned Citizens have been voicing and documenting their opposition to the existence of an Industrial Chemical disposal site, Woodside Landfill, situated within close proximity of residential areas in the town of Walker and Satsuma.*

*It's not fair, as a Livingston Parish citizen, to have to put up with this. It's not right for us. We live in the dump now. It surrounds us by three sides. It's not fair to us.*

*I was previously told you wouldn't be able to see the landfill, but you can. I asked for a privacy fence. The police jury told me the landfill wouldn't come so far back, and that it would be capped off. They showed me plans for a golf course and parks. Now it's adjacent to my residential property.*

*The parish gains what they want, even if a few people are inconvenienced. I understand. It's all about the money.*

*They should close the facility and move it to a less populated area. It adversely affects more than the 6000 people mentioned in the permit. Those records don't take into account all the recent development.*

*I am concerned that the landfill will affect the quality of life. I don't want a landfill to expand and take over this parish.* <sup>44, 45, 46, 47, 48, 49</sup>

## LDEQ RESPONSE TO ISSUE NO. 20

As previously stated, the Louisiana constitution does not establish environmental protection as an exclusive goal, but instead, requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social, and other factors. Please see the attached Basis for Decision Section VIII for a detailed discussion of this issue.

There are no zoning restrictions that prohibit the location of the facility in this area. Also, in accordance with LAC 33:VII:521.B.1.c, the existing facility meets the 200 foot buffer zone requirement. Further the facility complies with the Land Use requirements of LAC

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<sup>44</sup> See S. McCaskill letter to LDEQ (EDMS Document No. 36365202)

<sup>45</sup> See K. Benton, [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36367883)

<sup>46</sup> See H. Braud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>47</sup> See M. Mistic statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>48</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>49</sup> See C. Carter statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

33:VII.521.A.1.c. The LDEQ has considered this information and finds that the facility has met this requirement.

With regard to the commenter's request for a fence, the mandate to install a privacy fence is not within the LDEQ's authority; however, the LDEQ does require as per Solid Waste regulation LAC 33:VII.521.B.1.a that the facility employ a perimeter barrier and other control measures to prevent access of unauthorized persons from the landfill area. The facility complies with this requirement.

Further, Woodside complies with Solid Waste regulation LAC 33:VII.521.B.1.e regarding landscaping and other beautification efforts. The facility takes measures to provide and maintain attractive landscaping which impacts the aesthetics of the facility and the surrounding area.

The WLRC is an existing landfill. There are no new units or processes associated with the air permit or the solid waste permit. Nevertheless, alternative sites and benefits of continuing to utilize the existing location are discussed in detail in the attached Basis for Decision Section IV.

#### **ISSUE NO. 21**

*The harshness of toxic chemical gases flowing over the landscape should not have to be endured by anyone. No one has the right to chemically alter the air we breathe.*

*The landfill can have a negative health impact on unsuspecting citizens.*

*Woodside landfill should be shut down as it poses too great a threat to the air that we breathe.*

*It makes no sense to allow this facility to contaminate the air that we and our children breathe.*  
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#### **LDEQ RESPONSE TO ISSUE NO. 21**

As previously stated, there is no process change or equipment change associated with the air permit or the solid waste permit. The issue of how odors and emissions will be controlled is described in the attached *Basis for Decision* Section VI.

Also, see LDEQ RESPONSES TO ISSUES NO. 12 and 13 for information related to the requirements of the Part 70 Operating Permit which meet or exceed standards set by the EPA and the LDEQ to protect human health and the environment.

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<sup>50</sup> See K. Benton, [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36367883)

<sup>51</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>52</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

## ISSUE NO. 22

*The area is experiencing residential expansion and has opportunity for economic development. The landfill can have a negative effect on the possible economic development of the community.*

*We are concerned about Woodside's negative effects on economic development. The area is a rapidly expanding residential area for people who work in Baton Rouge. It is surrounded on all sides by homes, schools, and small businesses. The landfill could be detrimental to the local economy by restricting development of important infrastructure, such as hospitals, and economic stimulants such as a major theme park.*

*DEQ should do their job and look hard at this facility, and really evaluate the economic value. I am concerned about negative economic impacts of the facility on potential clean businesses, such as Bass Pro and Disney. Tourists will be turned off by toxic chemicals.*

*The parish doesn't need Waste Management's economic resources. The parish has Bass Pro, there are lots of people moving here. There is growth at the Satsuma exit and in the Juban area, which will bring a lot of money.*<sup>53, 54, 55, 56</sup>

## LDEQ RESPONSE TO ISSUE NO. 22

The issue of how odors and emissions are controlled is described in the attached *Basis for Decision* Section VI.

See LDEQ RESPONSE TO ISSUE NO. 12 for information related to the requirements of the Part 70 Operating Permit, which meet or exceed standards set by the EPA and the LDEQ to protect human health and the environment.

Also, see LDEQ RESPONSE TO ISSUE NO. 20 for information related to benefits of continuing to utilize the existing location of the WLRC.

## ISSUE NO. 23

*The permit should be deemed invalid because it is based on an illegal act. A former councilman admitted to selling his vote for \$17,000 for transfer of the operational permit from Livingston Parish to Waste Management. We request LDEQ return the permit to the parish.*

*The permit is tainted with bribery and greed. It should be nullified.*<sup>57, 58, 59, 60, 61</sup>

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<sup>53</sup> See K. Benton, [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36367883)

<sup>54</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>55</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>56</sup> See C. Carter statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>57</sup> See K. Benton, [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36367883)

#### **LDEQ RESPONSE TO ISSUE NO. 23**

Regardless of the circumstances associated with business decisions made at the parish level, WLRC's legal owner/operator as registered with the Louisiana Secretary of State's Office submitted applications for air and solid waste permits. Therefore, LDEQ is required to consistently apply the requirements federal and state Air Quality Regulations and the Louisiana Solid Waste Regulations.

#### **ISSUE NO. 24**

*Air quality tests need to be done independently of Waste Management. The tests should be done early in the morning, around dawn, when the air is heavy with humidity. Get your staff out in our area early in the mornings.*<sup>62</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 24**

See LDEQ RESPONSE TO ISSUE NO. 30.

#### **ISSUE NO. 25**

*The description of the facility location may be misleading. Please be aware that the facility under review is within the city limits of the town of Walker. The public notice states that it is "approximately two miles east of the town of Walker, which may lead people to believe that the area is rural. However, this is not the case any longer."*<sup>63</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 25**

The WLRC is an existing, permitted facility. Its location is well documented in LDEQ's records. Regardless of the wording of the facility location description, there is no evidence in the permit application to suggest that the facility violates any existing land-use requirements. Further, information concerning the land use and zoning criteria for the area is included in the *Basis for Decision*, Section IV.

#### **ISSUE NO. 26**

*The complaints we have today are based on the illegal performance of bioremediation in the 1990's.*

*I have experienced the harsh toxic gases resulting from the bioremediation process at Woodside Landfill. Waste Management has an apparent total disregard for the harsh effects that the bioremediation process will have on the residents in the surrounding communities. The inclusion of*

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<sup>58</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>59</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>60</sup> See M. Mistic statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>61</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>62</sup> See F. Roule email to LDEQ (EDMS Document No. 36689390)

<sup>63</sup> See D. Arledge letter to LDEQ (EDMS Document No. 36736723)

*the bioremediation process in the permit is proof of Waste Management and its managers' callous attitude toward nearby residents.*

*One DEQ staff member indicated that, in his opinion, bioremediation is ineffective. Another indicated that he is not a fan of bioremediation. It should be pulled out of the permit.<sup>64, 65</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 26**

The commenter has attributed statements to LDEQ staff members regarding what seem to be their personal opinions of bioremediation, in general. However, the LDEQ has reviewed and analyzed all information established in the administrative record as it specifically relates to bioremediation and has found it to be an acceptable methodology.

See also LDEQ RESPONSE TO ISSUE No. 11.

#### **ISSUE NO. 27**

*Woodside landfill should be shut down as it poses too great a threat to our drinking water aquifers.*

*It makes no sense to allow this facility to contaminate a precious resource, our drinking water.*

*I am concerned about the landfill's effects on my drinking water well. No one has ever checked it in 22 years.<sup>66, 67, 68</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 27**

The issue of possible contamination of groundwater is discussed in the attached *Basis for Decision*, Section VII.D. Also, please see a detailed discussion of this issue in LDEQ RESPONSE TO ISSUE NO. 34.

#### **ISSUE NO. 28**

*LDEQ has denied this permit once. Please deny it again. Concerned Citizens will endeavor to persevere and never give up our fight, until this threat to our community is eliminated and Woodside Landfill is closed. Our children's future health is in your hands but the fight for their future is in our hearts!<sup>69</sup>*

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<sup>64</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>65</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>66</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>67</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>68</sup> See D. Broussard statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>69</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

#### **LDEQ RESPONSE TO ISSUE NO. 28**

As stated in LDEQ RESPONSES TO ISSUE NOS. 12 and 13, the requirements of the Part 70 Operating Permit meet or exceed standards set by the EPA and the LDEQ to protect human health and the environment. In addition, these standards are intended to protect health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

#### **ISSUE NO. 29**

*It is my opinion that LDEQ has been negligent in protecting the public from these airborne toxic chemical exposures. My physician diagnosed me with bronchial spasms and chemical burn due to toxic exposure in October, 2003. I also experienced burning eyes and sinuses, as well as chest pain.*<sup>70</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 29**

As stated in LDEQ RESPONSES TO ISSUE NOS. 12 and 13, the requirements of the Part 70 Operating Permit meet or exceed standards set by the EPA and the LDEQ to protect human health and the environment. In addition, these standards are intended to protect health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

#### **ISSUE NO. 30**

*LDEQ does not respond promptly to our complaints regarding Woodside Landfill. It is no wonder that Waste Management has done anything they want in regard to air and water discharge at Woodside Landfill.*

*I believe there is collusion between a few LDEQ officials, State and Parish governmental officials and Waste Management employees. An example of this is the location of a stationary air monitor placed upwind of the landfill. Several LDEQ staff scientists expressed to me that it was in the wrong spot for a good sample, but that there was nothing that they could say or do, in fear of retribution from their superiors.*

*The monitoring was not at a good location. The recorders were not downwind of the facility during a sampling period which was able to be a scientifically correlated time period. We request that LDEQ hire an independent outside engineering /environmental consulting company to review the air contamination and collect real fence line data. This company should also be asked to comment on the bioremediation process.*

*Waste Management can hire experts to say what they want and DEQ accepts it, unquestioned.*<sup>71,72</sup>

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<sup>70</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>71</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>72</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

### **LDEQ RESPONSE TO ISSUE NO. 30**

The commenter has provided his opinion that an air monitor was not placed in an appropriate location because of relationships between LDEQ staff members, other state and parish governmental officials, and Waste Management staff.

LDEQ conducted ambient air monitoring near the facility during the periods of August 21-23, 2001, and September 10-13, 2001. The samples collected were analyzed by EPA-approved GC/MS (Gas Chromatograph separation with Mass Selective Detector) for 56 ozone-forming hydrocarbons and 59 targeted air toxic compounds. Review of the analytical data indicates that the ambient air concentrations for the compounds sampled are within the Louisiana Toxic Air Pollutant Ambient Air Quality Standards.

Further, LDEQ conducted extensive sampling to determine the ambient air concentrations in the area surrounding the facility during a three-month period from March 2003 through the beginning of June 2003. This study is available for review in a document entitled *Final Air Monitoring Report for the Woodside Landfill Project*,<sup>73</sup> dated August 21, 2003. In summary, a total of 54 samples were collected from the monitor during the three-month study.

The Woodside Sampler location was chosen based upon two primary factors, historical wind data and security. For the historical wind data, LDEQ looked at the wind data for Baton Rouge in 2001 and 2002, including both the yearly patterns and the seasonal patterns, particularly March - June. That analysis showed the most abundant winds were from the south-southwest, thus, making a north-northwest site location ideal. However, this orientation would have placed the sampler next to Woodside Drive, which would mean a significant amount of impact from vehicular emissions. This location was, therefore, determined unacceptable.

The next best location was due west of the site. This location offered a good abundance of offsite winds, was relatively free from vehicular emissions, and provided a very secure location because it was on the Sheriff's property. This location was chosen. There were citizen complaints about this location, citing they wanted the sampler placed closer to their residences. However, examination of the actual winds during the sampling study showed that a site location due east of the site or due south of the site, where the residents wanted the sampler, would place the sampler in a very low occurrence of offsite winds.

LDEQ used a sector sampler as part of the study. This is a dual channel sampler that can be programmed to only collect a sample when the winds blow across the site and impact upon the sampler. With this type of sampler over a period of several months, regardless of where the sampler is placed, representative offsite emissions can be collected.

As stated in the final report, the conclusions of the study are as follows:

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<sup>73</sup> See *Final Air Monitoring Report for the Woodside Landfill Project, August 21, 2003* (EDMS Document No. 37036555).

- None of the average concentrations for the Hazardous Air Pollutants (HAPs) studied have exceeded the Louisiana Ambient Air Standards or the Agency for Toxic Substances and Disease Registry (ATSDR) health-based standards.
- Most of the nearly 100 compounds targeted for monitoring were below or very close to the background levels. The concentrations detected were very consistent with statewide concentrations for these pollutants, indicating no significant local source for most of the targeted compounds.
- The results from the Woodside Landfill monitor show that benzene levels are consistent with the EPA National Air Toxics Assessment Study (NATA) estimations and meet acceptable standards.
- Some odoriferous samples were found to contain some amounts of methanol and ethanol, which are compounds consistent with the air emissions expected from municipal landfills. The concentrations of these compounds met the acceptable standards.
- An analysis of emissions from the landfill indicates some contributions of toluene, ethyl benzene, xylene and vinyl chloride. These contributions met the acceptable standards.

#### **ISSUE NO. 31**

*Basing decisions on the data from the stationary air monitor placed upwind of the facility is bad and incomplete science. Please refer to the air toxic summary for the stationary monitor which shows unusually low levels of air toxins compared to grab samples taken down wind of the landfill. I request that LDEQ conduct additional air testing prior to issuing the air permit. I also request fence line monitoring as soon as possible and during post closure.*<sup>74,75</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 31**

See LDEQ RESPONSES TO ISSUE NOS. 30 and 60.

#### **ISSUE NO. 32**

*The facility should not be given a permit renewal or be allowed to expand and should be closed to receiving any industrial chemicals immediately.*

#### **LDEQ RESPONSE TO ISSUE NO. 32**

As stated in the attached Basis for Decision, Section I, there is no new project, and there is no change in landfill acreage or airspace associated with the air or solid waste permit.

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<sup>74</sup> See K. Benton [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36771007)

<sup>75</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

### ISSUE NO. 33

*The air permit is under review by the courts. It really concerns us that the LDEQ sees it as its duty to take the Waste Management case against the citizens of this state. We see that fact that LDEQ is allowing Waste Management to apply for a new air permit, even before the court's decision is made, as an end run around the legal system.*

*We really question the motives of the state to allow this air permit application to move forward while the last application is before the courts.*

*We see no changes in the new air permit application to suggest that the new operation would not still be in violation of federal law and detrimental to our health. We respectfully request that LDEQ deny this air permit application, or at least put on hold until the court's decision is made public.<sup>76</sup>*

### LDEQ RESPONSE TO ISSUE NO. 33

See LDEQ RESPONSE TO ISSUE NO. 14.

### ISSUE NO. 34

*We have submitted documentation that the Woodside landfill is leaking leachate into our groundwater (drinking water) aquifers. Some of our wells are polluted from the landfill and it's no longer safe to drink the water. We have submitted proof of this fact to LDEQ, and have also shared it with experts from outside of Louisiana who have told us that it looks like a classical case of a landfill leaking.<sup>77,78</sup>*

### LDEQ RESPONSE TO ISSUE NO. 34

Along with the statements, above, the LDEQ has reviewed the referenced 70 page report authored by Dr. Ivor van Heerden. As it is difficult to respond to a report in a specific comment/response format (much of the data is not presented in a specific question or comment form) the LDEQ has chosen to respond to the technical issue raised, in general, and where appropriate, has addressed specific issues.

The LDEQ has prepared the following in response to the issues raised in the report that the Woodside Landfill is causing groundwater mounding, the landfill is leaking, and it is contaminating private wells.

In the Geologic Setting and Aquifer Characteristics section of this report CCLP refers to a Hanor 1993 report for supporting documentation and compares the geology and hydrogeology of the subject site to a hazardous waste landfill site in Livingston, Louisiana. The results at the Livingston

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<sup>76</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>77</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>78</sup> See *Contamination of Private Citizens as a Consequence of Leakage from the Woodside Landfill and Expansion Area*, Livingston Parish, Louisiana (April 20,2008), I. van Heerden , (EDMS Document No. 36792123)

site did show that the underlying clay there had a higher vertical hydraulic conductivity rate than Woodside Landfill that Hanor attributed to secondary porosity and fracturing, and sand beds.

In addition, while certain areas of the hazardous waste landfill showed a groundwater rise of approximately 1 meter, Hanor stated, "There is, however, no evidence for a systematic, site-wide increase in the groundwater table. In fact, there are even areas around the perimeter of the site removed from currently active areas of site development and cell construction where water levels decreased slightly during this period."

It can be concluded that the hydrogeological conditions discussed in the groundwater report are not present throughout the Livingston site.

The LDEQ has conducted a detail review of the Hanor report of the Livingston Landfill and CCLP's Groundwater report of the Woodside Landfill. The LDEQ has concluded that because of the difference in construction of the two landfills and the fact that the increase in vertical hydraulic conductivity of the Livingston Landfill is related to the construction of the landfill. This fact confirms that the groundwater outside the construction zone of the Livingston landfill has not been affected. Based on this determination, a credible correlation between the hydrogeology of the Livingston Landfill and the Woodside Landfill has not been demonstrated.

Review of additional hydrogeologic data of the area shows that the velocity of the groundwater flow rate within the permeable units beneath the facility is on the order of a few tens of feet per year and not the approximately 4,000 ft/yr stated in the CCLP report. Also, the concentration of chlorides detected in the citizen's wells during the 1999 LDEQ sampling event was in all cases below 20 ppm. The concentration of chlorides in the monitoring wells at the Woodside Landfill is as high as 750 ppm, which is not significantly different from the background data of 681 ppm collected in 1987. The low concentration of chlorides in the citizen's wells indicates that the groundwater in the vicinity of the Woodside Landfill has not migrated to where the citizen's wells are located. Since, chloride contamination in groundwater moves at a higher rate than barium and arsenic, it appears that the levels of barium and arsenic in the citizen's wells represent background concentrations of those two constituents in that area.

It should also be noted that there are several active and inactive oil and gas wells along US 190 just north of the landfill and barium is a common constituent found in drilling mud.

As stated above, an independent investigation by the EPA concluded that there was insufficient evidence of the Woodside Landfill contaminating citizen's wells. In addition, it should also be noted that the Woodside facility has an inward hydraulic gradient making it unlikely for leachate to move out of the facility because the hydraulic pressure outside the liner is higher than the hydraulic pressure inside the liner.

Additionally the CCLP groundwater report states that a change in groundwater flow or mounding proves that a leak has occurred. The LDEQ disagrees with this statement. The loading pressure of

a landfill may alter groundwater flow and cause mounding but the LDEQ's review of this facility reveals no indication of mounding at all.

After careful review of the LDEQ's file and the public comments resubmitted by CCLP and others, the LDEQ stands by the following conclusions:

1. the landfill is not leaking, and
2. there is no mounding taking place under the landfill.

#### **ISSUE NO. 35**

*We request that LDEQ make all information available to an independent engineering/environmental consulting company for review. This needs to be a company that has no connection to Waste Management. Because we believe there has been a close relationship between the "old" LDEQ and Waste Management, we believe that this approach of using outside independent consultants would be a strong signal that the Jindal administration, the "new" LDEQ, is taking citizens' concerns very seriously.<sup>79</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 35**

The commenter's particular issue with regard to the air permit or solid waste permit is not clear. It appears that the commenter is implying that because of business or political relationships, the LDEQ would not provide appropriate administrative and technical reviews prior to reaching a final permit decision.

Regardless of who is serving as the Governor of the State of Louisiana, the LDEQ is required to consistently apply the requirements of the federal and state Air Quality Regulations and Louisiana Solid Waste Regulations.

As stated in the Conclusion of the attached Basis for Decision, the LDEQ performs "a careful review and evaluation of the entire administrative record, which includes the permit applications, Environmental Assessment Statement, Emission Inventory Questionnaires (EIQ), additional application-related information, the proposed permits, and all public comments."

The LDEQ has sufficient resources provided by the State of Louisiana to accomplish its mission as defined by state law and performs its function according to all legal requirements. The LDEQ reviews and analyzes all information established in the administrative record. LDEQ staff performs both administrative and technical reviews to determine whether the applications meet the necessary conditions for the issuance of a permit and establishes permit terms and conditions necessary to demonstrate compliance with permit. The LDEQ review is subject to public review and comment.

#### **ISSUE NO. 36**

*Woodside landfill is sitting on an active fault zone. We have supplied a detailed scientific report regarding this fault zone. We request that LDEQ fully investigate the geology of the landfill and*

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<sup>79</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

*hire an independent engineering/environmental consulting company to review the geological data. This needs to be a company that has no connection to Waste Management.*

*Waste Management has claimed in the past that there are laterally continuous peats beneath the facility and therefore there are no faults. We have tracked down the drilling engineers who were present when the borings were made who confirmed there were no peats and were astounded that Waste Management would make that claim.*

*I am concerned about the fault lines. I don't believe it is all clay underneath the landfill. I believe at some point, it will leak.<sup>80,81,82</sup>*

### **LDEQ RESPONSE TO ISSUE NO. 36**

Please see LDEQ RESPONSE TO ISSUE NO. 35 regarding the issue of LDEQ hiring an independent engineering/environmental consulting company with no connection to Waste Management to review the geological data.

Along with the statements, above, the LDEQ has reviewed the referenced 43 page report authored by Dr. Ivor van Heerden. As it is difficult to respond to a report in a specific comment/response format (much of the data is not presented in a specific question or comment form) the LDEQ has chosen to respond to the technical issue raised, in general, and where appropriate, has addressed specific issues.

In the geology report, CCLP states that faulting is evident at the Woodside Landfill and presents as evident by GPS determination of seeps and scarps, aerial photographic interpretation, a review of boring data, various reports and surveys, and Light Detection and Ranging (LiDAR) interpretation.

CCLP performed a GPS survey and aerial photographic interpretation; however, neither results of the GPS survey nor the aerial photographic interpretation of the seeps and scarps study was submitted with this report. Therefore, the LDEQ was unable to review this data.

CCLP reviewed boring data from the existing landfill and expansion area and concludes that there "... [is no] evidence of laterally continuous layers. ...no continuous peats, no continuous fossil soil horizons, no laterally continuous organic layers what so ever." The LDEQ reviewed this same boring data from STE who conducted a geotechnical investigation and submitted a report dated January 25, 1985. This report contained 49 borings most of which noted light gray to black organic clay at approximately 30 feet below ground surface. A Golder Associates, Inc. Hydrogeological Report dated August 1988 also confirms that organic clay can be found with reasonable consistency

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<sup>80</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>81</sup> See S. Bethune statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>82</sup> See *Active Geological Faults Under Existing Woodside Landfill and Expansion Area*, Livingston Parish, Louisiana (April 20, 2008), I. van Heerden, (EDMS Document No. 36792123)

across the site at about 11 to 12 feet [MSL]. Numerous logs from the boreholes in the expansion area also encounter organic matter at the same depth.

Furthermore, CCLP states that the occasional rootlet or wood fragments are not organic layers, nor are they evidence of paleosols. In support of their position, CCLP states that Mr. Billy Prochaska and Mr. Jesse Arnold, both are engineers who have directly or indirectly performed engineering analysis for the facility in the past, made statements that there are no peats beneath the facility. While the LDEQ cannot comment on these statements based on hearsay, it should be noted that Jesse Arnold submitted a statement of support of the Woodside expansion modification on August 14, 2001. It should also be noted that Mr. Billy Prochaska was at one time part owner of STE, although his name is not on the STE report mentioned above.

A paleosol is simply defined as a buried soil horizon of the geologic past; therefore, all soil, rock, and fossils are evidence of a paleosol. Peat is defined as partially reduced plant or wood material, containing approximately 60 percent carbon and 30 percent oxygen. Therefore, it is technically accurate to refer to wood, peat, and other organic matter as an organic paleosol. The LDEQ still maintains the previous position as stated in the January 22, 2004 comment summary that an organic paleosol layer consisting of organic clay, peat, wood, roots, or trace of organic matter are noted on many logs from various investigations on the site at the same depth. Therefore, there is no evidence of faulting.

Additional evidence for faulting presented by CCLP included a discussion on slickensides described in boring logs. It should be noted that slickensides often result from forces other than faulting, such as sequenced layers of weak and strong beds and differential settling. Slickensides have been noted in numerous geotechnical boreholes throughout the State where they are not related to faulting. The LDEQ has reviewed all of the data submitted in the permit modification and in citizens' comments and finds no evidence that faults crop out at the land within 200 feet of the existing facility or the proposed expansion area.

Several reports and Department of Natural Resources (DNR) dockets are referred to regarding faults that have recently been discovered within several miles; however, no specific information was submitted for technical review regarding their exact location or depth. In addition, the DNR records are from the oil and gas industry and deal with energy reserves at great depth. Therefore, the LDEQ does not believe that these faults have any impact on the landfill. CCLP's own report states that "Existing [oil and gas] industry gravity and seismic data do not have sufficient resolution to locate near-surface faults.

Regarding the LSU 2003 Seismic Survey submitted (line 1 and line 4), the seismic data was taken off property. Dr. Lorenzo, who collected the data, states in the Preliminary Report dated December 5, 2003 that he had to "mute out the top 30 meters of data to eliminate unwanted refracted seismic arrivals." So, fault traces at the surface are not shown where such traces would be of concern.

The CCLP submitted Light Detection and Ranging (LiDAR) data which shows Dr. van Heerden's interpretation of many lineaments transecting the facility that he has interpreted as faults. The

LDEQ has reviewed Figure 15 and compared it to an unmarked copy of the LiDAR data and concludes that the lineaments identified on Figure 15 as faults appear to be either erosional features due to their close proximity to creek beds and the lack of shadows observed at the known faults or there is simply no lineament observed where indicated on Figure 15. Only the Scotlandville and Livingston faults as shown on Figure 4 of the CCLP report and another fault further north of the Livingston fault are recognized as faults.

The Conclusion section of this report states that peer review of CCLP's research has confirmed their results. It should be noted that a July 20, 2004 letter from the USEPA and addressed to Dr. van Heerden and copied LDEQ, states that "Based on the information provided, we cannot definitively determine that secondary faults exist under the landfill, or that the landfill is the source of the alleged contamination in private wells."

Also, an August 18, 2004 letter from the Louisiana Geological Survey (LGS), in response to a request by the U.S. Army Corps of Engineers, issued the results of an evaluation of all information submitted by CCLP plus extensive field work outlined in the attached letter. They concluded that "... the claims of the CCLP could not be substantiated, as no significant credible evidence was presented or could be found in support of any of them".

After careful review of the LDEQ's file and the public comments resubmitted by CCLP and others, the LDEQ stands by the conclusion that there is no faulting within 200 feet of the landfill.

#### **ISSUE NO. 37**

*We believe that if the landfill continues to operate, it could harm Louisiana's reputation in the environmental arena. We are concerned that continued operation of the landfill could hinder Louisiana's coastal restoration effort because it could hurt Louisiana's ability to prove to Congress that the federal money given for coastal restoration would be well-spent. If the landfill is allowed to continue to operate, it could imply that Louisiana does not truly care for its environment.<sup>83</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 37**

LDEQ fails to see any connection between the air and solid waste permits for the WLRC and Louisiana's coastal restoration efforts.

#### **ISSUE NO. 38**

*The air reports list things like ethylene (that's hazardous), butadiene, propylene, trimethylbenzene and so forth. Are the emissions hazardous or non-hazardous? That's what I don't understand.<sup>84</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 38**

The requirements of the Part 70 Operating Permit meet or exceed standards set by the EPA and the LDEQ to protect human health and the environment. See LDEQ RESPONSES TO ISSUE NOS. 12

<sup>83</sup> See I. van Heerden [representing Concerned Citizens of Livingston Parish (CCLP)] letter to LDEQ (EDMS Document No. 36792123)

<sup>84</sup> See H. Braud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

and 13 regarding the permitted emissions. In addition, these standards are intended to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

#### **ISSUE NO. 39**

*I disagree with the IT response. I don't think the potential and real adverse environmental effects of the proposed facility have been avoided to the maximum extent possible.*<sup>85</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 39**

As previously stated, the LDEQ has conducted a review of all application-related materials, including the EAS and responses to the "IT Questions" and has not found them to be inaccurate or inadequate. Waste Management has provided all information as requested by the LDEQ and as required as part of the permit decision process. Details of the analysis of *Avoidance of Adverse Environmental Effects* are presented in the attached *Basis for Decision* Section VII.

#### **ISSUE NO. 40**

*In reference to the IT response for the following: by which of the following potential pathways did releasers of hazardous material endanger local residents or living things? The air? Yes, it's in danger. Water? Yes, it's in danger. The soil? It's in danger.*<sup>86</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 40**

See LDEQ RESPONSE TO ISSUE NO. 39 above.

In addition, as previously stated, the Louisiana constitution does not establish environmental protection as an exclusive goal, but instead, requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social, and other factors. Please see the attached *Basis for Decision* Section VIII for a detailed discussion of this issue.

#### **ISSUE NO. 41**

*The air pollution used to be occasional; now it's 24/7. It's not fair to us. It seems like we've been sold out.*

*This is a major source of toxic air pollutants (TAPS). It cannot be regulated. It goes up into the air. You can't stop it unless you shut the facility down and move it somewhere else.*

*People living near the facility will be faced with toxic fumes and chemical burns.*

*People at the ballpark cannot concentrate because of heavy fumes.*

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<sup>85</sup> See H. Braud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>86</sup> See H. Braud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

*I have concerns because I have breathing problems. Sometimes I am not able to open my windows. I hate to think of what the landfill is doing to the air quality.*

*I don't think the air needs to be where they would have 70% of it (the landfill) open for us to breathe (what is exposed).<sup>87, 88, 89, 90</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 41**

As stated in LDEQ RESPONSES TO ISSUE NOS. 12 and 13, the requirements of the Part 70 Operating Permit meet or exceed standards set by the EPA and the LDEQ to protect human health and the environment. In addition, these standards are intended to protect health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

#### **ISSUE NO. 42**

*They can't tell me that sooner or later, that the liner won't leak. I believe they will deteriorate or that something sharp could puncture them. I believe that they could, at some point, leak.<sup>91</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 42**

A discussion of the landfill's composite liner, groundwater monitoring, and final closure monitoring with regard to possible leaking is addressed in the attached *Basis for Decision*, Section VII.D.

#### **ISSUE NO. 43**

*I don't think that the Woodside Landfill needs to be larger.<sup>92</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 43**

As stated in the attached *Basis for Decision*, Section I, there is no new project, nor is there any change in landfill acreage or airspace associated with the air or solid waste permit.

#### **ISSUE NO. 44**

*DEQ has done nothing in the past. I'm really looking for this new administration to do something about it because, in the past, they've done nothing.<sup>93</sup>*

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<sup>87</sup> See H. Braud statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>88</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>89</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>90</sup> See S. Bethune statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>91</sup> See S. Bethune statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>92</sup> See S. Bethune statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>93</sup> See K. Benton statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

**LDEQ RESPONSE TO ISSUE NO. 44**

The commenter's particular issue with regard to the air permit or solid waste permit is not clear. It appears that the commenter is implying that because of inadequate leadership or lack of leadership, the LDEQ would not provide appropriate administrative and technical reviews prior to reaching a final permit decision.

See also LDEQ RESPONSE TO ISSUE NO. 45.

**ISSUE NO. 45**

*This is a copy of air complaint-of air sampling (see W-3 in globo<sup>94</sup>), which has stopped since '05. We didn't have results. I can't find any, anywhere.<sup>95</sup>*

**LDEQ RESPONSE TO ISSUE NO. 45**

See LDEQ RESPONSE TO ISSUE NO. 30. Ambient monitoring at the landfill concluded in 2003. The *Final Air Monitoring Report for the Woodside Landfill Project*, dated August 21, 2003, is available via EDMS (see Document No. 37036555).

**ISSUE NO. 46**

*I am concerned about 2 late notifications of fires at Woodside Landfill (see W-3 in globo).<sup>96</sup>*

**LDEQ RESPONSE TO ISSUE NO. 46**

Any matter concerning the submittal of a required report after a regulatory deadline would be handled by the Office of Environmental Compliance, Enforcement Division.

**ISSUE NO. 47**

*There was a 94-drum load that came from a chemical plant in Alabama, even though most of the drums were labeled "household debris." One of the drums was smoking and they had to call Haz-Mat (see W-3 in globo).<sup>97</sup>*

**LDEQ RESPONSE TO ISSUE NO. 47**

Solid waste inspection procedures are in place to ensure that hazardous waste is not accepted into the landfill. To detect and prevent entry of prohibited waste, acceptance and testing procedures for receiving nonhazardous waste are presented in the facility's "Quality Assurance and Quality Control Program for Waste Acceptance." The program specifically provides pre-acceptance procedures to determine the acceptability of a waste. The program sets forth methods as precautions and controls to determine, record, and monitor incoming waste. The program includes random inspections of incoming loads in an effort to prevent disposal of waste excluded by the

<sup>94</sup>"W-3 in globo" refers to documentation received at the public hearing. See EDMS Document No. 36810038.

<sup>95</sup> See O. Couvillion statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>96</sup> See O. Couvillion statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>97</sup> See O. Couvillion statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

regulation and/or the solid waste permit. In accordance with LAC 33:III.VII.713.D.1, the receipt of hazardous waste shall be strictly prohibited and prevented. Any other waste that presents special handling or disposal problems may also be excluded.

**ISSUE NO. 48**

*There was another incident where they put a yellowish liquid, ammonia-type order (odor) that had a 68 degree flash point. They put it in the landfill (see W-3 in globo).<sup>98</sup>*

**LDEQ RESPONSE TO ISSUE NO. 48**

Solid waste inspection procedures are in place to ensure that hazardous waste is not accepted into the landfill. See LDEQ RESPONSE TO ISSUE NO. 47.

**ISSUE NO. 49**

*There was an incident where a gentleman died because of some catalyst in a cylinder that was mislabeled at Honeywell. It says here that Waste Management takes catalyst and other things.<sup>99</sup>*

**LDEQ RESPONSE TO ISSUE NO. 49**

The commenter has described an incident that occurred at another landfill. This *Public Comments Response Summary* document addresses comments relative to the air and solid waste permit actions for the WLRC.

**ISSUE NO. 50**

*The '99 annual report has waste codes with a number 1-12 in front of the codes. It tells about the tons. You wonder what these numbers are. It is not clear what the waste codes mean.<sup>100</sup>*

**LDEQ RESPONSE TO ISSUE NO. 50**

In accordance with the annual report detailed instructions, the permittee is required to provide a summary of all industrial solid waste received for disposal. The annual report utilizes an Industrial Waste Code Number using a number that begins with the facility's unique solid waste facility identification and ends with a three digit waste code descriptive of the waste. In addition, the non-industrial waste carries a solid waste identifier including the following:

- 01 - Residential
- 02-Commercial
- 03-Trash
- 04-Woodwaste
- 05-Construction/Demolition Debris
- 06-Incinerator Ash
- 07-Domestic Sewage Sludge

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<sup>98</sup> See O. Couvillion statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>99</sup> See O. Couvillion statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>100</sup> See O. Couvillion statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

- 08-Underground Storage Tank Correction Action Waste
- 09-Agricultural Waste
- 10-Stable
- 11-Infectious Waste
- 12-Friable Asbestos
- 13-Other, also specify name

**ISSUE NO. 51**

*Waste Management has the ability to monitor the gas flow and the composition of gas-and the composition of gas emissions. They should have used that emission-those emission numbers in the permit, due to the variance of the landfill gases emitted per day, per time of year, because of the waste that are in the landfill. Without using the actual emission info- emission information, Waste Management is not going to be able to find out exactly what they're putting into these flares, what emissions are coming out of these flares, and certainly, will not be able to comply with the permit here today.<sup>101</sup>*

**LDEQ RESPONSE TO ISSUE NO. 51**

See LDEQ RESPONSE TO ISSUE NO. 5.

**ISSUE NO. 52**

*The permit is for the entire landfill. It's not just for the gas flare. The gas flares will only encompass waste after five years on the landfill. The permit does not actually specify how much acreage the landfill gases will be encompassed. The numbers vary from 67 to 200 to 207,525. They say that there is a capacity of over 41 million cubic yards- I can't remember the numbers—but there is not actual information for the current use of the expected growth of the landfill, through the life of this permit. The permit needs to include these numbers to properly calculate the non-captured gases.<sup>102</sup>*

**LDEQ RESPONSE TO ISSUE NO. 52**

See LDEQ RESPONSE TO ISSUE NO. 6.

**ISSUE NO. 53**

*This isn't really just about the few individuals that live around the site. The Woodside gas emissions are going to contribute to an 8-hour ozone non-attainment are in Livingston Parish. Atmosphere ozone is created by these man-made chemicals such as the nitrogen oxides and volatile organic compounds that are going to be released from the site. These nitrogen oxides will contribute to environmental problems such as ozone and smog. And these problems contribute to health problems such as breathing difficulties. The air permit will specifically allow these chemicals to contribute to the ozone problem in Livingston Parish and Baton Rouge. Therefore, by changing the map on these permits, and voiding a PSD review, they're no longer protecting the community. They're, in fact, endangering it by allowing more of these ozone problems. Therefore, LDEQ should not-not pass*

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<sup>101</sup> See H. Gaw statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>102</sup> See H. Gaw statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

*this permit. And should, in fact, look to different alternatives or stricter limitations in order to protect the public.*<sup>103</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 53**

LDEQ's *Basis for Decision, Waste Management of Louisiana, LLC, Woodside Landfill and Recycling Center* provides a discussion of the comparison of the current and proposed permitted emissions. See the attached Basis for Decision document, Section I.B.

Also, see LDEQ RESPONSE TO ISSUE No. 8.

#### **ISSUE NO. 54**

*This new air permit is not based on new data. It's based on Waste Management changing the way it's estimating the pollution after the First Circuit vacated its permit, instead of conducting a prevention of significant deterioration review to prove that this gas flare is not going to harm the air quality for the people who live and work around the facility.*<sup>104</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 54**

See LDEQ RESPONSE TO ISSUE NO. 14.

#### **ISSUE NO. 55**

*This permit is not based on new emissions data. And, in fact, the main problem with this permit is that no one knows what's actually coming out of this flare. Unlike an industrial process, it's controlled, and where we know exactly what a process' by-product is, this gas is from decomposing waste. It changes. The composition changes, hour by hour, day to day. To really know what's coming out of that flare, you have to know what's going in. And this permit does not require Waste Management to monitor what gas is going into that flare, so if you know what's coming out- so it can show that it's complying with the permit. Require the monitoring so we can say, yes, you are in compliance, or, no, you need to clean up your act.*<sup>105</sup>

#### **LDEQ RESPONSE TO ISSUE NO. 55**

See LDEQ RESPONSE TO ISSUE NO. 5.

#### **ISSUE NO. 56**

*Previously, there were severe problems in the DEQ and certification process, including unethical and illegal gratuities to the DEQ staff and employees.*

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<sup>103</sup> See H. Gaw statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>104</sup> See J. Witkowski statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>105</sup> See J. Witkowski statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

*There were modifications and changes of the permit owned by the parish by Waste Management without the knowledge, participation or involvement of Livingston Parish.*

*Mr. Gerald Walter, attorney for Waste Management, testified and told changes to that permit were granted without DEQ holding public hearings.*

*We are protesting DEQ holding this public hearing. We are requesting a moratorium on this public hearing until some of these allegations (are resolved).<sup>106</sup>*

#### **LDEQ RESPONSE TO ISSUE NO. 56**

The commenter's specific concern or issue is unclear as it relates to WLRC's air and solid waste permits being considered during the public comment period. The commenter has provided his opinion that required steps of the permit process did not occur for a previous permit decision for WLRC. This *Public Comments Response Summary* document addresses comments relative to the air (1740-00025-V1) and solid waste (P-0080-R2) permit actions at issue for the WLRC.

For the above-mentioned permits, all activities have occurred as required by applicable air and solid waste regulations.

#### **ISSUE NO. 57**

*The citizens and taxpayers of Louisiana need to be assured that they will get a fair shake. Some things indicate that we haven't gotten a fair shake. DEQ has not exhibited the ability, willingness and capability of giving us a fair shake in solid waste disposal in Livingston Parish.*

#### **LDEQ RESPONSE TO ISSUE NO. 57**

The commenter's specific concern or issue is unclear as it relates to WLRC's air and solid waste permits being considered during the public comment period. However, it seems that the commenter is voicing a general request for assurance that citizens' concerns would be given fair consideration by LDEQ when faced with proposed permit decisions.

As previously stated in LDEQ RESPONSE TO ISSUE NO. 35, the LDEQ performs a careful review and evaluation of the entire administrative record, which includes the permit applications, Environmental Assessment Statement, Emission Inventory Questionnaires (EIQ), additional application-related information, the proposed permits, and all public comments.

In addition, the Louisiana constitution does not establish environmental protection as an exclusive goal, but instead, requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social, and other factors. Please see the attached *Basis for Decision* Section VIII for a detailed discussion of this issue.

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<sup>106</sup> See H. Harris statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

**ISSUE NO. 58**

*This is not the way I expected the hearing to go today. According to the original legislation, they were supposed to take comments from people supporting the facility, followed by comment—a comment from someone not supporting the facility. And that's not quite what we had tonight. You had a whole block of people supporting the facility. And then, the people not supporting the facility. I would ask that as part of the response to public comments, that DEQ would respond to that so we'll know how this is supposed to work.*<sup>107</sup>

**LDEQ RESPONSE TO ISSUE NO. 58**

Louisiana Revised Statute 30:2017 determines the order of the speakers, which LDEQ is required to follow. The current version of this statute can be found at <http://www.deq.louisiana.gov/portal/Portals/0/planning/regs/EQA%202007.pdf>.

**ISSUE NO. 59**

*There seems to be an undertone of the landfill's workers versus the citizens. The problems are not originating at the worker level. The problems are originating at a much higher level, and they are associated with the way that the permit has been issued.*

*If it's at all possible, instead of Waste Management spending their money on legal costs, is there some way we can get together and talk through some of these issues, so that money can be spent on resolving potential problems, both with the citizens and at the facility.*<sup>108</sup>

**LDEQ RESPONSE TO ISSUE NO. 59**

The commenter's specific concern or issue is unclear. For information associated with the requirements of the permit decision issuance process, see LDEQ RESPONSE TO ISSUE NO. 35.

Regarding the commenter's suggestion that citizens and facility representatives meet and discuss potential problems, LDEQ encourages, but cannot require, continued dialogue among the affected parties.

**ISSUE NO. 60**

*My first choice (for resolving a potential problem) would be monitoring for which the results are available to the public. Citizens will know if there are problems and Waste Management will know that, too.*

*We need permanent air monitor stations so we can develop or have that data, just like the ground water data. I feel that this should be a requirement of this air permit.*<sup>109, 110</sup>

<sup>107</sup> See G. Miller statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>108</sup> See G. Miller statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>109</sup> See G. Miller statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

<sup>110</sup> See J. Klier statement, *Court Reporter Transcript for Public Hearing*, March 25, 2008, (EDMS Document No. 36807038)

**LDEQ RESPONSE TO ISSUE NO. 60**

Based on the modeling results and currently required monitoring (see LDEQ RESPONSES TO ISSUE NOS. 5, 6, 12, and 13), fence line air monitoring is not warranted.

If an ambient air quality issue was to emerge in the Town of Walker area, LDEQ has sufficient resources to identify and respond to the cause of the problem. For example, LDEQ's Mobile Air Monitoring Laboratory (MAML) is a self-contained mobile laboratory capable of real-time sampling and analysis and is equipped to monitor particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, ozone, volatile organic compounds (VOC), hydrogen sulfide, and mercury.

**ISSUE NO. 61 (grouped and summarized from numerous comments expressing support of the proposed permits)**

*I strongly urge your department to approve the two permits requested by Waste Management for Woodside Landfill.*

*Waste Management has been an "exceptional corporate citizen in our community."*

*Waste Management provides economic benefits to the community since it is a major source of revenue to the parish and local municipal governments.*

*Waste Management provides jobs to the area.*

*Waste Management often "goes beyond what is simply required by regulation to do what is best for the environment and their neighbors."*

*"It is my expert opinion that emissions from the landfill have been determined in accordance with the state and federal regulations and AP-42 guidance... Woodside's application meets or exceeds the applicable state and federal regulatory requirements"*

*"Countless families depend on Woodside Landfill... We resent the false accusations that a few unhappy individuals keep making against the company for which I work. I work here every day and know that what they say is often untrue or greatly exaggerated. I certainly would not work here if it were not a pleasant and safe place."*

*We need Woodside Landfill to continue operating in our community. The employees do a professional job and provide a necessary service for our community.*<sup>111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129</sup>

<sup>111</sup> See B. Sullivan letter to LDEQ (EDMS Document No. 36672399)

<sup>112</sup> See R. Bermudez letter to LDEQ (EDMS Document No. 36672739)

<sup>113</sup> See D. Fruge letter to LDEQ (EDMS Document No. 36796205)

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<sup>114</sup> See A. Sheffield letter to LDEQ (EDMS Document No. 36689284, 36796213)

<sup>115</sup> See D. Thorley letter to LDEQ (EDMS Document No. 36796089)

<sup>116</sup> See S. and R. Bergeron letter to LDEQ (EDMS Document No. 36694551)

<sup>117</sup> See S. Bergeron letter to LDEQ (EDMS Document No. 36694553)

<sup>118</sup> See D. Steib letter to LDEQ (EDMS Document No. 36796211)

<sup>119</sup> See M. Dickman letter to LDEQ (EDMS Document No. 36796207)

<sup>120</sup> See K. Abboud letter to LDEQ (EDMS Document No. 36736725)

<sup>121</sup> See C. Hall letter to LDEQ (EDMS Document No. 36736727)

<sup>122</sup> See K. George letter to LDEQ (EDMS Document No. 36736729)

<sup>123</sup> See T. Garrett letter to LDEQ (EDMS Document No. 36736731)

<sup>124</sup> See T. Elnaggar letter to LDEQ (EDMS Document No. 36792119)

<sup>125</sup> See B. Sullivan letter to LDEQ (EDMS Document No. 36797355)

<sup>126</sup> See A. Crochet letter to LDEQ (EDMS Document No. 36800052)

<sup>127</sup> See group of letters from 131 individuals to LDEQ (EDMS Document No. 36800086)

<sup>128</sup> See K. Kruszynski letter to LDEQ (EDMS Document No. 36796085)

<sup>129</sup> See E. Wright letter to LDEQ (EDMS Document No. 36796209)

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL SERVICES  
BASIS FOR DECISION**

**PART 70 OPERATING PERMIT NO. 1740-00025-V1  
AND  
SOLID WASTE STANDARD PERMIT NO. P-0080R2**

**AGENCY INTEREST (AI) NO. 11767**

**WOODSIDE LANDFILL AND RECYCLING CENTER  
WASTE MANAGEMENT OF LOUISIANA, LLC  
WALKER, LIVINGSTON PARISH, LOUISIANA**

The Louisiana Department of Environmental Quality (LDEQ), Office of Environmental Services (OES), issued a Part 70 Operating Permit, Number 1740-00025-V1, and through a separate permit decision issued a Solid Waste Permit, Number P-0080R2 to Waste Management of Louisiana, LLC, ("Waste Management") for the Woodside Landfill and Recycling Center ("WLRC" or "the landfill").

The WLRC is located in Walker, Livingston Parish, Louisiana.

The Air Permits Division and the Waste Permits Division of OES each conducted a review of their respective permit applications and related submittals. Each division prepared a proposed permit decision. For the public's convenience, the OES coordinated the public participation activities for both proposed permits. This Basis for Decision addresses issues common to both proposed permits, and, where applicable, separately addresses issues relevant to only one of the proposed permits.

For the WLRC, the LDEQ finds that as a part of the "IT Requirements,"<sup>1</sup> adverse environmental impacts have been minimized or avoided to the maximum extent possible. Save Ourselves v. La. Envtl. Control Commission, 452 So. 2d 1152, 1157 (La. 1984). To make this determination, the LDEQ finds that the Part 70 (air) permit application and the Solid Waste renewal permit application for Waste Management, Woodside Landfill and Recycling Center, comply with all applicable

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<sup>1</sup> The "IT Requirements" or "IT Questions" are five requirements [see Save Ourselves v. Envtl. Control Comm'n, 452 So. 2d at 1152, 1157 (La. 1984)] that both the permit applicant and the LDEQ consider during certain permit application processes. Although the five requirements have been expressed as three requirements (see Rubicon Inc., 670 So. 2d at 475, 483 (La. App. 1 Cir 1996), rehearing denied), the requirements remain basically the same whether stated as five or as three. The "IT Requirements" must satisfy the issues of whether:

- 1) the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible;
- 2) a cost benefit analysis of the environment impact costs balanced against the social and economic benefits of the project demonstrate that the latter outweighs the former;
- 3) there are alternative projects or alternative sites or mitigating measures, which would offer more protection to the environment than the proposed project without unduly curtailing nonenvironmental benefits to the extent applicable.

federal and state statutes and regulations and have otherwise minimized or avoided the environmental impacts to the maximum extent possible. Additionally, the LDEQ finds that Waste Management has met the alternative projects, alternative sites, and mitigation measures requirements of Save Ourselves for the existing landfill. Id. at 1157.

After the LDEQ determined that adverse environmental impacts had been minimized or avoided to the maximum extent possible, it balanced social and economic factors with environmental impacts. Notably, the Louisiana Constitution does not establish environmental protection as an exclusive goal, but instead, requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social, and other factors. Id. Accordingly, the LDEQ finds that the social and economic benefits of the proposed project will outweigh greatly its adverse environmental impacts.

The details of the LDEQ's reasoning are set forth below:<sup>2</sup>

## FINDINGS OF FACT

### **I. BACKGROUND**

#### **A. Description of Facility**

The WLRC is an existing municipal solid waste disposal facility. It is located approximately 2 miles east of the Town of Walker, one-half mile south of the intersection of U.S. Highway 190 and Woodside Drive, on approximately four hundred eighty-eight (488) acres. The facility receives a variety of non-hazardous solid wastes (including municipal solid wastes, such as residential and commercial solid waste, and industrial waste), which are disposed of by landfilling. A gas collection and control system (GCCS) was installed in 2003 to control landfill gas emissions. Currently, the landfill is supported by a variety of operations and maintenance-related activities, including operation and maintenance of mobile equipment, non-mobile equipment powered by internal combustion engines, leachate handling, and the storage of motor fuels and lubricants. The facility is currently operating under solid waste permit number P-008R1 (issued April 22, 1996) and interim air permit limits within Enforcement Tracking No. AE-CN-07-0206 (issued June 20, 2008).<sup>3,4</sup>

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<sup>2</sup> Any finding of fact more appropriately designated as a conclusion of law shall be considered also a conclusion of law; and any conclusion of law more appropriately designated as a finding of fact shall be considered also as a finding of fact.

<sup>3</sup>The Consolidated Compliance Order and Notice of Potential Penalty was issued following the First Circuit Court of Appeal's opinion which vacated the previous air permit. This action provides interim permit limits for the WLRC.

<sup>4</sup>See Consolidated Compliance Order and Notice of Potential Penalty (EDMS Document No. 37044077)

## B. Proposed Permit Actions

Both permit applications, including the Environmental Assessment Statements (EAS), and additional application-related submittals are available to the public in EDMS.<sup>5</sup>

### Air Permit Application

Waste Management submitted a revised permit application and an Emission Inventory Questionnaire (EIQ) dated October 19, 2007, requesting a revision of the Part 70 Operating Permit for the existing WLRC pursuant to the Louisiana Administrative Code (LAC) 33:III.501 and 507. Additional application-related information dated December 7, 2007, and June 29, 2007 was also submitted to and reviewed by the LDEQ.

Permit No. 1740-00025-V1 will be a Part 70 Operating permit for the landfill. Emissions from the previous projects (GCCS Construction Project and Landfill Expansion Project) have been reevaluated to determine applicability of various regulations. No new project is associated with the air permit.

### Solid Waste Permit Application

Waste Management also submitted a permit application dated January 12, 2005, requesting a renewal permit to continue operation of the existing WLRC Type I and Type II Landfill pursuant to La R.S. 30:2151 *et. seq.* and LAC 33: Part VII. Final copies of the permit application dated May 14, 2007 and amendments to the application dated August 16, 2007 were also submitted to and reviewed by the LDEQ.

Solid Waste Permit No. P-0080R2 is a renewal permit to continue operation of the existing Type I and Type II Landfill. There is no new project, nor is there any change in landfill acreage or airspace associated with the renewed solid waste permit.

### Facility Operations

As stated above in Section I.A, WLRC is an existing municipal solid waste disposal facility. It receives a variety of non-hazardous solid wastes (including municipal solid wastes, such as residential and commercial solid waste, and industrial waste), which are disposed of by landfilling.

Facility infrastructure includes: roads, buildings, pipelines and treatment facilities.<sup>6</sup> A gas collection and control system (GCCS) was installed in 2003 to control landfill gas emissions.

Currently, the landfill is supported by a variety of operations and maintenance-related activities, including operation and maintenance of mobile equipment, non-mobile equipment powered by internal combustion engines, leachate handling, and the storage of motor fuels and lubricants. The WLRC receives wastes by trucks. It is anticipated that bioremediation

<sup>5</sup> EDMS stands for Electronic Document Management System, the LDEQ's electronic repository of official records that have been created or received by LDEQ. Employees and members of the public can search and retrieve documents stored in the EDMS via this web application. (See <http://edms.deq.louisiana.gov/app/doc/querydef.aspx>).

<sup>6</sup> See EAS, Section IV.A (EDMS Document No. 36580609, p. 287 of 299)

of hydrocarbon-contaminated sludge and soils (non-hazardous) will continue to take place at WLRC.

The WLRC is also currently permitted for its water discharges under the Louisiana Pollutant Discharge Elimination System (LPDES); however, the water permit is not included in this Basis for Decision.

As previously stated, there are no new units or processes associated with the air permit or the solid waste permit. Existing units or processes are as follows:

#### Air Units or Processes

The landfill utilizes a Gas Collection and Control System (GCCS) which routes the collected gas to a control device (flare). As described in the EAS, "the system consists of a series of gas collection wells networked to a flare. The flare consumes the generated methane and other trace compounds and reduces their emissions".<sup>7</sup> The facility also has leachate storage, and handling equipment, a solidification basin, a bioremediation area, stationary internal combustion engines, an odor control system, and fuel storage tanks.

#### Air Emissions

As previously stated, there is no process change or equipment change associated with the proposed permit. The proposed permitted emissions are changed from the current permit (Part 70 Operating Permit No. 1740-00025-V0) because of a change in calculated potential emissions, based on emission factors provided by the existing flare's vendor. Emissions from the operation of the WLRC are expected to include emissions of particulate matter (PM<sub>10</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and volatile organic compounds (VOC). Comparison of current and proposed permitted emissions indicates that the facility-wide annual emission rate for all five of the listed pollutants will be less than the current permitted emissions. The table below shows the decrease in emissions for all five of the listed pollutants.

Comparison of the permitted emissions from Permit Nos. 1740-00025-V0 and 1740-00025-V1 is as follows:

Table 1

Permitted Emissions Rate in Tons Per Year		
Pollutant	Vacated Permit (No. 1740-00025-V0)	Proposed Permit (No. 1740-00025-V1)
PM <sub>10</sub>	27.90	16.91
SO <sub>2</sub>	12.18	10.31
NO <sub>x</sub>	65.59	65.32
CO	621.06	237.73
VOC	37.89	34.27

<sup>7</sup> See EAS, Section IV.G (EDMS Document No. 36580609, p. 292 of 299)

The air permit application was reviewed for compliance with 40 CFR Part 70 Louisiana Air Quality Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) does not apply. The WLRC is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51-Comprehensive Toxic Air Pollutant Emission Control Program. Proposed permitted emissions of toxic air pollutants are as follows:

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Emission Rate
1,1,2,2-Tetrachloroethane	0.15
1,1,2-Trichloroethane	0.12
1,1-Dichloroethane	0.23
1,2-Dichloroethane	0.10
1,2-Dichloropropane	0.11
Acrylonitrile	0.33
Benzene	0.41
Carbon disulfide	0.04
Carbon tetrachloride	0.16
Carbonyl sulfide	0.03
Chlorobenzene	0.10
Chloroethane	0.08
Chloroform	< 0.01
Dichlorobenzene	0.03
Dichloromethane	1.22
Ethyl benzene	1.24
Methyl chloride	0.05
Methyl ethyl ketone	1.51
Methyl isobutyl ketone	0.18
Tetrachloroethylene	0.32
Toluene	5.31
Trichloroethylene	0.26
Vinyl chloride	0.05
Vinylidene chloride	0.08
Xylene (mixed isomers)	3.81
n-Hexane	0.54
<b>Total</b>	<b>16.46</b>

Other VOC (TPY):

Other LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Emission Rate
1,1,1-Trichloroethane	0.17
Hydrochloric Acid	12.82
Hydrogen Sulfide	1.16
Mercury (and Compounds)	< 0.01

Other LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Emission Rate</u>
Total	14.15

Solid Waste Processes

The solid waste permit application was reviewed for compliance with LAC 33, Part VII. The WLRC is classified as a Type I and Type II Landfill, as determined by the Office of Environmental Services, Waste Permits Division. The solid waste permit addresses aspects of the landfill operations such as landfill cell design including lining and slope criteria, recordkeeping, procedures for waste inspection, gas collection wells, buffer zone, security measures, management of site-generated leachate and contaminated stormwater, biological treatment of non-hazardous solid wastes, daily cover procedures, interim and final cover, and groundwater monitoring system.

**II. PUBLIC COMMENT**

Public notice regarding the solid waste permit renewal application and the Environmental Assessment Statement (EAS) were published in *The Advocate*, Baton Rouge, Louisiana on September 22, 2007; and in the *Livingston Parish News*, Denham Springs, Louisiana on September 23, 2007, placing the renewal and EAS on public review and serving as notification of the public hearing. The public hearing was originally scheduled for January 8, 2008, but was rescheduled. A notice of the draft permit decisions for the WLRC concerning the air and solid waste permit applications by the LDEQ and requesting public comment and informing the public of the time and location of a public hearing was published in *The Advocate*, Baton Rouge, Louisiana on February 14 and 16, 2008; and in the *Livingston Parish News*, Denham Springs, Louisiana, on February 14 and 17, 2008. The Public Notice was also mailed to concerned citizens listed in the Office of Environmental Services' Public Notice Mailing List on February 12, 2008. The public comment period closed on April 28, 2008. The LDEQ, Office of Environmental Services (OES), held a public hearing on Tuesday, March 25, 2008, beginning at 6:30 p.m. at the Livingston Parish Courthouse, Court Room #1, 20180 Iowa Street, Livingston, LA. The public comment period and public hearing afforded the public an opportunity for technical comments on the Technically Complete Solid Waste Permit Renewal Application, the proposed Part 70 Air Operating Permit, and the associated Environmental Assessment Statement (EAS).

The LDEQ received oral and written comments on the proposed permits and the environmental assessment statement during the public hearing and written comments during the public comment period.

**III. PUBLIC COMMENTS RESPONSE SUMMARY**

A "Public Comment Response Summary" was prepared for all significant comments and is attached and made a part of this Basis for Decision.

**IV. ALTERNATIVE SITES: Are there alternative sites, which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?**

While the LDEQ recognizes that the concepts of alternative sites, alternative projects, and mitigative measures are closely interrelated and overlap, each concept is addressed separately in this document for purposes of emphasis and clarity. However, the LDEQ stresses the interrelation of the three; for example, the choice of a particular site could involve mitigative factors and possibly alternative project considerations; likewise, selection of an alternative project could invoke mitigative factors and impact site selection. Apparently, the Louisiana First Circuit Court of Appeal has also recognized this interrelationship and now considers the three requirements as one. Matter of Rubicon, Inc., 95-0108 (La. App. 1 Cir. 2/14/96), 670 So. 2d 475, 483.

Therefore, because of this interrelationship, the LDEQ adopts any and all of its findings on all of the three factors under each of the specific designated areas -- alternative sites (Section IV), alternative projects (Section V), and mitigative measures (Section VI). Additionally, the assessment and findings set forth below in Section VII (Avoidance of Adverse Environmental Effects) also interrelate and have been considered relative to these facts.

Waste Management owns the site for the existing WLRC located in Walker, Louisiana. Because the WLRC is an existing facility, a traditional alternative site analysis was not appropriate here. Nevertheless, in considering the permit applications, the LDEQ reviewed the existing operations, compliance record, and other matters pertinent to the site.

An alternative to the existing WLRC would be to construct a "Greenfield" site (an undeveloped site) for the landfill.<sup>8</sup> The Greenfield site would produce significantly more adverse environmental impacts than the existing facility, e.g., put more land into use for waste disposal purposes and use more resources for the construction of a new facility.

Besides constructing a Greenfield site, another alternative would be to relocate existing WLRC activities to another existing municipal and industrial solid waste landfill. However, as stated in the EAS, as accepted by the LDEQ, the use of such a site could "result in increased transportation costs and risks to the public" due to the "increased use of heavily traveled roadways and/or the use of substandard two lane roads."<sup>9</sup> In addition, use of another existing landfill could "curtail non-environmental benefits" due to decreased competition in the solid waste market, as described in the EAS, and as

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<sup>8</sup>See LAC 33:III. 551.B

<sup>9</sup>See EAS, Section IV.A (EDMS Document No. 36580609, pp. 286-287 of 299)

accepted by the LDEQ.<sup>10</sup>

As stated in the EAS, as accepted by the LDEQ, site criteria which were considered during original siting, as well as during subsequent modifications are as follows:

- Proximity to U.S. highway and interstate;
- Availability of affordable land;
- Presence of an adjacent “dump”; and
- Central location for the project service area.<sup>11</sup>

Another benefit described in the EAS, accepted by the LDEQ, of continuing to utilize the existing location is the presence of the site infrastructure. This includes “roads, buildings, pipelines, and treatment facilities”<sup>12</sup> that can continue to be utilized. An alternative site would require duplicating these items elsewhere and would result in additional environmental impacts.<sup>13</sup>

Also, as described in the EAS, as accepted by the LDEQ, there were other sites that have been considered, however, they “did not offer the same level of commercial viability and environmental protection.”<sup>14</sup>

In addition, according to the EAS, as accepted by the LDEQ, “since the site was originally completed, improvements in access to the interstate have been completed, thus enhancing access to the site.”<sup>15</sup>

Further, according to information in the EAS, as accepted by the LDEQ, “no existing comprehensive land use or zoning plan established by local regulations or ordinances preclude the location and operation of the WLRC.”<sup>16</sup>

Waste Management has maintained a good record of permit compliance at the present location in all media. A review of LDEQ’s TEMPO database and EDMS indicates that there is only one open enforcement action. This action was issued following the First Circuit Court of Appeal’s opinion which vacated the previous air permit. This action (Consolidated Compliance Order and Notice of Potential Penalty) provides interim limits for the WLRC.<sup>17</sup> Therefore, WLRC has demonstrated a record of maintaining protection to the environment with its existing operations at its present location.

<sup>10</sup>See EAS, Section IV.A (EDMS Document No. 36580609, p. 286 of 299)

<sup>11</sup>See EAS, Section IV.A (EDMS Document No. 36580609, p. 287 of 299)

<sup>12</sup>See EAS, Section IV.A (EDMS Document No. 36580609, p. 287 of 299)

<sup>13</sup>See EAS, Section IV.A (EDMS Document No. 36580609, p. 287 of 299)

<sup>14</sup>See EAS, Section IV.A (EDMS Document No. 36580609, p. 287 of 299)

<sup>15</sup>See EAS, Section II.D (EDMS Document No. 36580609, p. 281 of 299)

<sup>16</sup>See EAS, Section IV.C (EDMS Document No. 36580609 p. 288 of 299)

<sup>17</sup>See Consolidated Compliance Order and Notice of Potential Penalty, June 20, 2008, Enforcement Tracking No. AE-CN-07-0206 (EDMS Document No. 37044077)

CONCLUSION: For the foregoing reasons, the LDEQ finds there are no alternative sites, which would offer more protection to the environment than the existing site without unduly curtailing non-environmental benefits.

**V. ALTERNATIVE PROJECTS: Are there alternative projects, which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?**

The LDEQ finds that the existing WLRC offers more protection to the environment than any other possible alternative without unduly curtailing nonenvironmental benefits. Additionally, the LDEQ recognizes that selection of the most environmentally sound project usually also serves as a mitigative measure because the two considerations overlap considerably.

The permitted activities would allow the WLRC to continue to provide traditional disposal of municipal and industrial solid waste.

As described in the EAS, as accepted by the LDEQ, Waste Management considered the use of alternate technologies; however, "no other technology is economically viable while providing the maximum environmental benefits."<sup>18</sup> These alternate technologies considered by Waste Management are:

- Incineration;
- Resource recovery; and
- Composting.

All three of these alternate technologies were ruled out as follows:

- Incineration- According to the EAS, as accepted by the LDEQ, there are several reasons that incineration was ruled out. Some of these reasons are:
  - Development of this type of project requires considerable capital and a long period of time to implement.
  - Very few units have been designed to handle refuse alone.
  - Noncompliance with stringent air pollution standards has caused many of these projects to fail.
  - The need for disposal is not eliminated, since the incinerator ash must be properly disposed.
  - Volatile metals, plastics, and household cleaners can cause incinerators to emit toxic compounds and have the potential to create products of incomplete combustion.
- Resource recovery was considered but was not found to be a viable option at this location at the present time. As indicated in the EAS, as accepted by the LDEQ, "the excessive cost for the operation of a waste to energy facility cannot be supported in the service area. If, however, the Baton Rouge Metropolitan Area should provide the correct economic and industrial environment to make resource

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<sup>18</sup>See EAS, Section III.A (EDMS Document No. 36580609, p. 282 of 289)

recovery a feasible alternative at some time in the future, this landfill would be available for the necessary disposal of the ash generated by a Resource Recovery Plant.”<sup>19</sup>

- Composting was also considered as an alternate project; however, composting was not determined to be a viable option for the following reasons as described in the EAS, and as accepted by the LDEQ:
  - There is a very limited market for compost, and far more compost is produced than could be used.
  - For a significant percentage of the solid waste stream accepted by the facility, materials such as rubber, plastics, and metals cannot be composted because they do not readily decompose; therefore, they would require landfilling.<sup>20</sup>

The continuing operation of the landfill for traditional disposal provides for long-term stability and assurance of waste disposal options in the area. The soil bioremediation process offers a benefit by allowing contaminated soil to be remediated and later used as daily cover at the site. As stated in the EAS, as accepted by the LDEQ, “the WLRC fits into an overall integrated waste management system that offers a wide variety of treatment, recovery, incineration and disposal options, if such alternatives become viable in the future.”<sup>21</sup>

**CONCLUSION:** For the foregoing reasons, the LDEQ finds there are no alternative projects, which would offer more protection to the environment than the existing landfill facility without unduly curtailing non-environmental benefits.

**VI. MITIGATING MEASURES: Are there mitigating measures, which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?**

According to information submitted by Waste Management, as accepted by the LDEQ, the landfill will be designed and operated to maximize environmental protection and prevent adverse environmental impacts. Its state-of-the-art engineering design improvements “allow for a facility footprint that maximizes volume per square foot and minimizes the impacted area. Other facilities in Louisiana require significantly greater areas to accommodate similar volumes.”<sup>22</sup>

Also, although there is no current integrated solid waste management plan for Louisiana or for the area in and around Livingston Parish, WLRC does serve the local and regional community as described in the EAS, as accepted by the LDEQ, as follows:

<sup>19</sup>See EAS, Section III.A (EDMS Document No. 36580609, p. 282 of 299)

<sup>20</sup>See EAS, Section III.A (EDMS Document No. 36580609, p. 283 of 299)

<sup>21</sup>See EAS, Section III.A (EDMS Document No. 36580609, p. 283 of 299)

<sup>22</sup>See EAS, Section III.B (EDMS Document No. 36580609, p. 283 of 299)

WLRC is part of an integrated waste management system serving the local and regional communities. As the economic environment continues to improve for waste reduction, recovery and recycling, the need for "state of the art" strategically-located sanitary landfills will continue for the proper disposition of the residuals that do not have economic value. WLRC will continue to serve an integral role by providing economically and environmentally sound disposal and allow the implementation of a formal plan to proceed rapidly.<sup>23</sup>

In addition, WLRC is able to reduce disposal volumes and minimize environmental impacts by biologically treating soils, treating wet wastes, and by using construction debris for road building.<sup>24</sup>

WLRC has developed and implemented the following to control the release of wastes or waste constituents into the environment:

- A detailed *Quality Assurance and Quality Control (QA/QC) Plan for Waste Acceptance*;
- *Quality Assurance and Quality Control (QA/QC) Plan for Waste Rejection and Removal*;
- *Quality Assurance and Quality Control (QA/QC) Program for Solidification*;
- Surface impoundments and landfill areas will have a composite lining system;
- Daily cover procedures help to prevent release of materials from vectors or from blowing winds;
- Biological treatment of waste containing degradable constituents through land application;
- Groundwater monitoring system; and
- Gas collection and control system and gas monitoring system.<sup>25, 26</sup>

Further, as detailed in the EAS, as accepted by the LDEQ,

the odors and emissions will be controlled through the application of daily cover over the working face of the landfill. As areas reach the design elevations, interim and final covers will be installed. Odors (and emissions) are also controlled by the GCCS (Gas Collection and Control System).<sup>27</sup>

The Part 70 Operating Permit (air permit) meets all applicable Louisiana Air Quality Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). The emissions levels allowed by the proposed permit are in compliance with all state and federal regulations and are determined to be acceptable and protective of the environment.

<sup>23</sup>See EAS, Section V.B (EDMS Document No. 36580609, p. 293 of 299)

<sup>24</sup>See EAS, Section V.B (EDMS Document No. 36580609, p. 293 of 299)

<sup>25</sup>See EAS, Section V.D (EDMS Document No. 36580609, pp. 294-295 of 299)

<sup>26</sup>See EAS, Section III.D (EDMS Document No. 36580609, p. 286 of 299)

<sup>27</sup>See EAS, Section IV.G (EDMS Document No. 36580609, p. 292 of 299)

The renewed solid waste standard permit meets all Solid Waste Regulations. Its requirements ensure that the design and operation of the existing site will continue to effectively mitigate any negative impacts to the environment.

**CONCLUSION:** For the foregoing reasons, the LDEQ finds there are no mitigating measures, which would offer more protection to the environment than the WLRC, as proposed, without unduly curtailing nonenvironmental benefits.

**VII. AVOIDANCE OF ADVERSE ENVIRONMENTAL EFFECTS: Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?**

As part of the permitting process, potential and real adverse environmental impacts of pollutant emissions from the permitted sources are assessed by the LDEQ to ensure that they are minimized. Along with the permit applications, the LDEQ considers the information outlined in the WLRC's EAS as part of the LDEQ's assessment.

The following paragraphs describe the assessment by type of impact:

**A. Air Emissions**

The permit will require that all emission sources be controlled through technology to meet or exceed the requirements of applicable state and federal regulations, such as the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) for Toxic Air Pollutants, by utilizing information obtained through air quality analysis and public involvement. Even though the applicable requirements do not prevent sources from increasing emissions, they do function to protect public health and welfare, protect the areas of historic value, and ensure economic growth consistent with the preservation of existing clean air resources.

The emissions from this project shall be controlled to meet or exceed the requirements of all applicable regulations and defined permit conditions. The estimated emissions submitted by WLRC's emission sources, as accepted by the LDEQ, are based on conservative engineering design calculations and established, approved emission factors.

Air emissions from the operation of the landfill are expected to include particulate matter (PM<sub>10</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and volatile organic compounds (VOC). In addition, toxic air pollutants listed in Section I.B are also expected to be emitted. Emissions of these air pollutants are controlled using good design, the application of daily cover, and operation of the gas collection and control system (which includes a series of gas collection wells networked to a flare).

The accidental air release prevention program is mandated by Section 112(r) of the Clean Air Act Amendments and codified in 40 CFR 68 (see also LAC 33:III.Chapter 59). According to the EPA, the purpose of a Risk Management Plan (RMP) is to "prevent

accidental releases of substances that can cause serious harm to the public and the environment from short-term exposures and to mitigate the severity of releases that do occur.”<sup>28</sup> The RMP describes actions that an affected facility must do to “prevent accidental releases of hazardous chemicals into the atmosphere and reduce their potential impact on the public and the environment.”<sup>29</sup> However, based on the WLRC’s air permit application,<sup>30</sup> a Risk Management Plan (RMP) is not required by the regulations because the facility will not produce, process, handle, or store any substance listed in 40 CFR 68.130 or Table 59.0 and 59.1 of LAC 33:III.Chapter 59 in amounts greater than the prescribed threshold quantities as determined in accordance with 40 CFR 68.115.

WLRC will have protective measures on-site to handle emergency situations. As described in the EAS, as accepted by the LDEQ, qualified facility operating personnel will participate in training in quality assurance/quality control programs as well as safety programs. Extensive training programs include areas such as:

- Emergency procedures;
- Emergency equipment;
- Emergency communication and alarm systems;
- Inspection, repair and replacement of emergency and monitoring equipment;
- Operation of automatic waste feed cutoff systems;
- Response to groundwater contamination incidents;
- Shut-down of operations; and
- Response to fires, explosion and other emergency events.<sup>31</sup>

## B. Wastewater Discharges

As described in the EAS, and as accepted by the LDEQ, the facility’s design includes features to prevent contaminated stormwater from entering surface waters containing living organisms and used for fishing and recreation. These features include site levees and drainage systems that have been sized to contain all run-off from a 25-year/24-hour storm. Any contaminated stormwater, as well as site-generated leachate, will be collected and pumped to the Town of Walker’s publicly-owned wastewater treatment plant, and then discharged according to its Louisiana Pollutant Discharge Elimination System (LPDES) permit requirements.<sup>32,33</sup>

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<sup>28</sup> EPA’s General Risk Management Plan Program Guidance, April 2004

[http://yosemite.epa.gov/oswer/ceppoweb.nsf/vwResourcesByFilename/Intro\\_final.pdf/\\$File/Intro\\_final.pdf](http://yosemite.epa.gov/oswer/ceppoweb.nsf/vwResourcesByFilename/Intro_final.pdf/$File/Intro_final.pdf)

<sup>29</sup> EPA’s General Risk Management Plan Program Guidance, April 2004

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<sup>30</sup> Part 70 Operating permit application (EDMS Document No. 36354673, pp. 42 and 44 of 198)

<sup>31</sup> See EAS, Section I.D (EDMS Document No. 36580609, p. 278 of 299)

<sup>32</sup> See EAS, Section I.B (EDMS Document No. 36580609, p. 276 of 299)

<sup>33</sup> See EAS, Section I.A.4 (EDMS Document No. 36580609, p. 275 of 299)

### C. Solid and Hazardous Waste Generation

Based on information in the EAS, as accepted by the LDEQ, "on-site generation of solid waste is expected to be less than one percent of the total waste handled. It will be limited to accumulated trash from offices and residual wastes from cleaning and maintenance operations. Used oil, and other maintenance fluids will be collected and recycled or disposed off site by properly licensed handlers."<sup>34</sup> In addition, "site-generated used oil and other maintenance fluids will be shipped to licensed recycling or disposal facilities."<sup>35</sup>

According to the LDEQ's records, the WLRC site does not have a hazardous waste permit, As stated in the EAS, as accepted by the LDEQ, the facility only accepts "solid wastes that are non-hazardous under LAC 33.V.105."<sup>36</sup>

Potential and real adverse environmental effects associated with the generation of solid wastes will be avoided to the maximum extent possible.

### D. Other Releases

Releases to the soil from the landfill are unlikely due to the design of the facilities. As previously stated above in VII.B, site levees and drainage systems have been sized to contain run-off from heavy rains. In addition, the following are described in the EAS and accepted by the LDEQ:

- Should a release occur, "site personnel are equipped and trained to quickly contain any release that may occur outside of a containment area to prevent any impacts to water or soil."<sup>37</sup>
- The WLRC is designed with a "perimeter levee to prevent storm water entry into the active area or a release of untreated water from the active area."<sup>38</sup>
- "Each landfill cell will have a composite lining system consisting of a 60-mil HDPE flexible membrane and 3 feet of low permeability recompacted clay ( $1 \times 10^{-7}$  cms/s)."<sup>39</sup>
- If contamination occurs, "soils will be excavated and disposed in accordance with all applicable requirements."<sup>40</sup>

Groundwater is not expected to be impacted by the landfill. As described in the EAS, as accepted by the LDEQ, "a groundwater monitoring system has been installed and monitored semi-annually to detect any release from the landfill at the earliest possible time."<sup>41</sup>

<sup>34</sup>See EAS, Section I.A.3 (EDMS Document No. 36580609, p. 275 of 299)

<sup>35</sup>See EAS, Section I.A.4 (EDMS Document No. 36580609, p. 275 of 299)

<sup>36</sup>See EAS, Section I.A.(EDMS Document No. 36580609, p. 274 of 299)

<sup>37</sup>See EAS, Section I.B (EDMS Document No. 36580609, p. 276 of 299)

<sup>38</sup>See EAS, Section I.D (EDMS Document No. 36580609, pp. 276-277 of 299)

<sup>39</sup>See EAS, Section I.B (EDMS Document No. 36580609, p. 276 of 299)

<sup>40</sup>See EAS, Section I.B-C (EDMS Document No. 36580609, p. 276 of 299)

<sup>41</sup>See EAS, Section I.D (EDMS Document No. 36580609, p. 277 of 299)

Additionally, "the groundwater monitoring system will be maintained and monitored during the 30 year post-closure period."<sup>42</sup>

As described in the EAS, as accepted by the LDEQ, since 1984, the US Army Corps of Engineers (USACE) has inspected the site several times. The USACE concluded that wetlands are present on the site and that a Section 404 permit would be required before WLRC could place fill or dredged material in the wetlands area. However, during construction of the original portion of the landfill in 1993, a protective levee was placed between the wetland area and the landfill area; therefore, no 404 Dredge and Fill Permit was required. In 1997, USACE identified 118 acres of wetlands on adjacent property and determined that a Section 404 permit would be required prior to placing fill or dredged material in the wetlands area. Since the wetlands are dispersed, on-site mitigation is difficult. Therefore, as described in the EAS, as accepted by the LDEQ, "the Section 404 application submitted to the USACE included off-site compensatory mitigation. ...The Section 404 Permit was received on December 17, 2004." Therefore, Waste Management has worked in coordination with the USACE with regards to protection of or mitigation of wetlands on the WLRC site.<sup>43</sup>

**CONCLUSION:** Accordingly, the LDEQ finds that WLRC has avoided, to the maximum extent possible, adverse environmental impacts without unduly curtailing non-environmental benefits.

**VIII. COST/BENEFIT ANALYSIS (BALANCING): Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?**

The social and economic benefits of the proposed WLRC will greatly outweigh the adverse environmental impacts. Notably, the Louisiana constitution requires balancing, not protection of the environment as an exclusive goal: Save Ourselves, 452 So. 2d at 1157.

**A. Environmental Impact Costs**

Environmental impact costs include the following:

- Land will be taken out of use in order to provide land space for the landfill. However, as stated in the EAS, as accepted by the LDEQ, "no better use for the land is possible, due to the proximity of the existing disposal area...no additional adverse effect is sustained as a result of the continuation of operations on the site."<sup>44</sup>
- The landfill operations have a potential for air emissions. However, as described in the EAS, as accepted by the LDEQ, the WLRC has a gas collection and control system that is installed and in operation. Collected gases are routed to a control

<sup>42</sup> See EAS, Section III.D (EDMS Document No. 36580609, p. 286 of 299)

<sup>43</sup> See EAS, Section IV.B (EDMS Document No. 36580609, pp. 287-288 of 299)

<sup>44</sup> See EAS, Section I.D (EDMS Document No. 36580609, pp. 276-277 of 299)

device—a Landfill Gas Flare. This control system, along with the use of daily cover, interim and final cover, is designed to control air emissions.<sup>45</sup>

- The landfill operations have a potential for contaminated run-off. However, as described in the EAS, as accepted by the LDEQ, the WLRC is designed with a “perimeter levee to prevent storm water entry into the active area or a release of untreated water from the active area.”<sup>46</sup>
- The landfill operations have a potential for groundwater infiltration. However, as described in the EAS, as accepted by the LDEQ, the WLRC has a composite liner of clay overlain with a high density liner that will help to prevent migration of leachate from the landfill. In addition, a groundwater monitoring system that can detect releases from the landfill is already in place.<sup>47</sup>

Emissions from the WLRC will include the criteria pollutants: nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particulate matter with a diameter equal to or less than 10 microns (PM<sub>10</sub>), and volatile organic compounds (VOCs). NO<sub>x</sub> and VOCs are precursors for ozone.

The WLRC is a major source of toxic air pollutants (TAPs) and is subject to the Louisiana Air Toxics program under LAC 33:III.Chapter 51 - Comprehensive Toxic Air Pollutant Emission Control Program.

Waste Management modeled air emissions to determine compliance with applicable standards. WLRC's modeling shows the landfill will meet or exceed the requirements of the primary and secondary National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) for Toxic Air Pollutants. The project is not expected to cause air quality impacts that would adversely affect human health or the environment. Accordingly, there will be no “adverse” and “disparate” impact in the surrounding area.

### **B. Social and Economic Benefits**

The LDEQ finds that the social and economic benefits of the project will greatly outweigh its environmental impact costs. The social and economic benefits are discussed in detail below:

Overall, according to the EAS, as accepted by the LDEQ, “the landfill brings much-needed taxes and other revenues to the parish. Woodside Landfill and Recycling Center is the Livingston Parish Council's largest single source of general fund revenues, making up about one fourth of all general funds received.”<sup>48</sup>

Also, according to the EAS, as accepted by the LDEQ, the landfill has provided the following:

<sup>45</sup> See EAS, Section I.D (EDMS Document No. 36580609, pp. 276-278 of 299)

<sup>46</sup> See EAS, Section I.D (EDMS Document No. 36580609, pp. 276-277 of 299)

<sup>47</sup> See EAS, Section I.D (EDMS Document No. 36580609, pp. 276-277 of 299)

<sup>48</sup> See EAS, Section II.B (EDMS Document No. 36580609, p. 279 of 299)

- In 2002, WLRC provided almost \$1 million in royalty fees to the parish government and over \$1 million in 2003 and in 2004; and
- WLRC provides jobs for approximately 500 people in Livingston Parish (408 on WLRC payrolls and 66 contract workers) totaling over \$12.8 million in annual payrolls.<sup>49</sup>

CONCLUSION: Based on the reasoning above, the LDEQ finds that the social and economic benefits outweigh the environmental impact costs.

## IX. ENVIRONMENTAL JUSTICE CONSIDERATIONS

EPA's Office of Civil Rights in the Michigan Select Steel Title VI Complaint (EPA File No. 5R-98-R5, The Office of Civil Rights dated October 30, 1998) determined as follows in "Allegation Regarding Air Quality Impacts" Pages 25 and 26:

The environmental laws that EPA and the states administer do not prohibit pollution outright; rather, they treat some level of pollution as "acceptable" when pollution sources are regulated under individual, facility-specific, permits recognizing society's demand for such things as power plants, waste treatment systems, and manufacturing facilities. In effect, Congress—and, by extension, society—has made a judgment that some level of pollution and possible associated risk should be tolerated for the good of all, in order for Americans to enjoy the benefits of a modern society—to have heat in our homes, and the products we use to clean dishes or manufacture our wares. The expectation and belief of the regulators is that, assuming the facilities comply with their permit limits and terms; the allowed pollution levels are acceptable and low enough to be protective of the environment and human health.

EPA and the states have promulgated a wide series of regulations to effectuate these protections. Some of these regulations are based on assessment of public health risks associated with certain levels of pollution in the ambient environment. The National Ambient Air Quality Standards established under the Clean Air Act (CAA) are an example of this kind of health-based ambient standard setting. Air Quality that adheres to such standards is presumptively protective of public health. Other standards are "technology-based," requiring installation of pollution control equipment that has been determined to be appropriate in view of pollution reduction goals. In the case of hazardous air pollutants under the CAA, EPA sets technology-based standards for industrial sources of toxic air pollution, the maximum achievable control technology standards for industrial sources of toxic air pollution. The maximum achievable control technology standards under the Clean Air Act are examples of this kind of technology-based standards; an assessment of the remaining or residual risk is undertaken and

<sup>49</sup>See EAS, Section II.B (EDMS Document No. 36580609, pp. 279-280 of 299)

additional controls implemented where needed. [Clean Air Act 112(f)(2)(A)(1) states "... If standards promulgated pursuant to subsection (d) and applicable to a category or subcategory of sources emitting a pollutant (or pollutants) classifies as a known, probable, or possible human carcinogen, do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than one in a million, the Administrator shall promulgate standards under this subsection for such category." 42 U.S.C. § 7412(f)(2)(A)(1).]

Title VI and EPA's implementing regulations set out a requirement independent of the environmental statutes that all recipients of EPA financial assistance ensure that they implement their environmental programs in a manner that does not have discriminatory effect based on race, color, or national origin. If recipients of EPA funding are found to have implemented their EPA-delegated or authorized federal environmental programs in a manner which distributes the otherwise acceptable residual pollution or other effects in ways that result in a harmful concentration of those effects in racial or ethnic communities, then a finding of an adverse disparate impact on those communities within the meaning of Title VI may, depending on the circumstance may be appropriate.

Importantly, to be actionable under Title VI, an impact must be both "adverse" and "disparate." The determination of whether the distribution of effects from regulated sources to racial or ethnic communities is "adverse" within the meaning of Title VI will necessarily turn on the facts and circumstances of each case and nature of the environmental regulation designed to afford protection. As the United States Supreme Court stated in the case of Alexander v. Choate, 469 U.S. 287 (1995), the inquiry for federal agencies under Title VI is to identify the sort of disparate impacts upon racial or ethnic groups which constitute "sufficiently significant social problems, and [are] readily enough remediable, to warrant altering the practices of the federal grantees that had produced those impacts." Id at 293-94.

The complaint in this case raises air quality concerns regarding several NAAQS-covered pollutants, as well as several other pollutants. With respect to the NAAQS-covered pollutants, EPA believes that where, as here, an air quality concern is raised regarding a pollutant regulated pursuant to an ambient, health-based standard, and where the area in question is in compliance with, and will continue after the operation of the challenged facility to comply with, that standard, the air quality in the surrounding community is presumptively protective and emissions of that pollutant should not be viewed as "adverse" within the meaning of Title VI. By establishing an ambient, public health threshold, standards like the NAAQS contemplate multiple source contributions and establish a protective limit on cumulative emissions that should ordinarily prevent an adverse air quality

impact.

With respect to the pollutants of concern that are not covered by the NAAQS, Title VI calls for an examination of whether those pollutants have become so concentrated in a racial or ethnic community that the addition of a new source will pose a harm to that community. If there is no "adverse" impact for anyone living in the vicinity of the facility, it is unnecessary to reach the question of whether the impacts are "disparate."

[Reference: Letter from Ann E. Goode, Director of EPA's Office of Civil Rights to Father Phil Schmitter and Sister Joanne Chiaverni, Co-Directors, St. Francis Prayer Center, G-2381 East Carpenter Road, Flint Michigan 48909-7973].

Also note that the United States Supreme Court held in Alexander v. Sandoval, (532 U.S. (2001) [No. 99-1908, decided April 24, 2001], that there is no private cause of action to enforce Section 602 of Title VI of the Civil Rights Act of 1964, 78 Stat. 252, as amended, 42 U.S.C. §2000d *et. seq.*

LDEQ accepts the EPA's assessment and reasoning. Modeling shows emissions from the landfill as limited by the terms and conditions of the permit are not expected to impact air quality so as to cause or contribute exceedances of the primary or secondary National Ambient Air Quality Standards (NAAQS) or the Louisiana Ambient Air Standards (AAS) for Toxic Air Pollutants. Similarly, the operations of the solid waste landfill are not expected to cause or contribute to contamination of the groundwater. Since these standards are protective of human health and environment, there will be no "adverse" and "disparate" impact in the surrounding area.

## X. CONCLUSION

The LDEQ's Office of Environmental Services, Air Permits Division, has conducted a review of the Administrative Record, including the permit application and other information submitted by Waste Management. Part 70 Air Permit No. 1740-00025-V1 will be issued to Waste Management for the WLRC.

The Part 70 Permit for the WLRC will require that the emissions be controlled to meet or exceed the requirements of all applicable regulations and defined permit conditions. The estimated emissions from the project are based on conservative engineering design calculations and established, approved emission factors. The application details the emission calculations and state and federal regulatory requirements for the air emission sources.

It is not anticipated that emissions from WLRC in accordance with the terms and conditions of the air permit will cause or contribute to an exceedance of the primary or secondary National Ambient Air Quality Standards (NAAQS) for criteria air pollutants or the Louisiana Ambient Air Standards for toxic air pollutants beyond the industrial property.

These standards are presumed to be protective of human health and the environment, including sensitive individuals, such as children, the elderly and people with respiratory conditions. Such emissions are not expected to cause air quality impacts that will adversely affect human health or the environment.

Also, the LDEQ, Office of Environmental Services, Waste Permits Division, has conducted a review of the Administrative Record, including the permit application and other information submitted by Waste Management. The standard solid waste renewal permit no. P-0080R2 will be issued to Waste Management for the WLRC.

The local economy is expected to benefit from the operations of the landfill. The landfill is expected to enhance the current economy by continuing to provide personal income for the landfill's permanent and contract employees; continuing the tax revenues for Livingston Parish, surrounding parishes, the State of Louisiana, and the federal government; and facilitating the purchase of goods and services by the landfill and its employees from other businesses. These benefits are major, significant, and tangible. They outweigh the environmental impact costs of operation of the WLRC.

Based on a careful review and evaluation of the entire administrative record, which includes the permit applications, Environmental Assessment Statement, Emission Inventory Questionnaires (EIQ), additional application-related information, the proposed permits, and all public comments, the Louisiana Department of Environmental Quality, Office of Environmental Services, finds that the WLRC's proposed permits will comply with all applicable federal and state statutes and regulations and will comply with the requirements of Save Ourselves v. La. Env'tl. Control Commission, 452 So. 2d 1152, 1157 (La. 1984). Particularly, the LDEQ finds that the proposed permits have minimized or avoided potential and real adverse environmental impacts to the maximum extent possible and that social and economic benefits of the WLRC outweigh adverse environmental impacts. Id.



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5 Dec 2008

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SUSAN BETHUNE  
29835 HENDERSON LN  
WALKER, LA 70785-5821

12255  
MIKE CALDWELL  
2 LONG LAKE PLACE  
SPRING, TX 77381-0000

12252  
PATTY ARMSTRONG  
13267 N RIDGE AVE  
WALKER, LA 70785-0000

1416  
PAUL & KAREN BOUCHEREAU  
13497 L LANDRY RD  
GONZALES, LA 70737-0000

12717  
CRAIG/JENNIFER CALLENDE  
30403 LAFLEUR RUE  
WALKER, LA 70785-0000

12277  
DAVID ATLAYS  
1169 JOSEPH DELPIT DR  
BATON ROUGE, LA 70802-0000

12753  
DEREK/STACY BOUDREAU  
30400 JACKSON ST  
WALKER, LA 70785-0000

1456  
TAMMY/DONNIE/JARRED CARROLL  
14223 BECKETT  
PRIDE, LA 70770-0000

1805  
JIMMY AVERETT  
PO BOX 689  
WALKER, LA 70785-0000

12725  
CARMEN BOVA  
14329 MADISON OAKS  
WALKER, LA 70785-0000

1426  
SHERRIE CARTER  
29578 S SATSUMA RD  
LIVINGSTON, LA 70754-0000

12290  
DAW CASEY  
10658 HILLMONT DR  
BATON ROUGE, LA 70810-0000

5972  
JAMES DONOVAN  
9924 CHAPEL HILL  
DENHAM SPRINGS, LA 70726-0000

12262  
TRACY GARRETT  
33294 CANE MARKET RD  
WALKER, LA 70785-0000

12267  
GERALD CASTILLE  
140 CIRCLE DR  
SUNSET, LA 70584-0000

12298  
RUSSELL DUNCAN  
4343 SAINT GERARD  
BATON ROUGE, LA 70805-0000

12244  
HEATHER GAW  
6329 FRERET ST  
NEW ORLEANS, LA 70118-0000

1423  
ONEIL COUVILLION  
24095 JOE MAY RD  
DENHAM SPRINGS, LA 70726-0000

1480  
MAURICE DURBIN  
417 CENTERVILLE  
DENHAM SPRINGS, LA 70726-0000

12272  
KIM GEORGE  
10419 BROOKS DRIVE  
DENHAM SPRINGS, LA 70726-0000

12264  
ASONYA COWART  
34741 OAK PLACE DR  
DENHAM SPRINGS, LA 70708-0000

6070  
TAREK ELNAGGAR  
1515 POYDRAS ST  
NEW ORLEANS, LA 70153-3244

12266  
WARREN GUEDRY  
321 CHATEAU JON  
DENHAM SPRINGS, LA 70726-0000

2108  
ANNE CROCHET  
PO BOX 2471  
BATON ROUGE, LA 70821-0000

12257  
TERRY ELNAGGER  
192 FOREST OAKS DR  
NEW ORLEANS, LA 70131-0000

12303  
CHRISTY HALL  
14910 COURTNEY RD  
WALKER, LA 70785-0000

12702  
MELVIN CUNNINGHAM  
3363 REDSTONE ST  
SHREVEPORT, LA 71107-0000

12789  
RANDEL/FAY ELSENSOLIN  
30430 JACKSON  
WALKER, LA 70785-0000

5801  
HENRY HARRIS  
8759 HARRIS RD  
DENHAM SPRINGS, LA 70726-0000

12254  
BRENT DANIELS  
PO BOX 593  
TICKFAW, LA 70466-0000

12281  
ROYAL EVERY  
7055 REVERIE AVE  
BATON ROUGE, LA 70812-0000

12289  
JULIE HOUPY  
33565 JOHN BARBER RD  
HOLDEN, LA 70744-0000

12722  
ROGER DICKET  
14313 MADISON OAKS  
WALKER, LA 70785-0000

12258  
RENE FAUCHEUX  
19452 MELISSA LANE  
COVINGTON, LA 70435-0000

12278  
KENNETH HOWZE  
32041 LINDER RD LOT 23  
DENHAM SPRINGS, LA 70726-0000

12854  
MARK DICKMAN  
CHEMTREAT INC - 4461 COX RD  
GLEN ALLEN, VA 23060-0000

12275  
MARVIN FRANCIS  
14119 OLD GENESSEE RD LOT 1  
TICKFAW, LA 70466-0000

12713  
JAMIE/ANDREA HULL  
30433 LA FLEUR RUE  
WALKER, LA 70785-0000

12282  
LEMACH DOKES, JR  
44998 HWY 16  
PINE GROVE, LA 70453-0000

12851  
DUANE FRUGE  
7635 JEFFERSON HWY STE 143  
BATON ROUGE, LA 70809-0000

12720  
JUDY JACKSON  
14376 MADISON OAKS  
WALKER, LA 70785-0000

12250

JEROME/LAVERNE KLIER  
30440 MAYER ST  
WALKER, LA 70785-0000

12706

JAMES MCDANIEL  
14377 MACKENZY WAY  
WALKER, LA 70785-0000

12287

JOHNNY MYLES  
4836 HWY 1042 LOT 911  
GREENSBURG, LA 70441-0000

12849

KENNETH KRUSZYNSKI  
3333 WARRENVILLE RD STE 200  
LISLE, IL 60532-0000

12721

BRAD/JENNA MCMASTERS  
14356 MADISON OAKS  
WALKER, LA 70785-0000

12724

BECKY NEAL  
14310 MADISON OAKS  
WALKER, LA 70785-0000

12263

BRENDA LABORDE  
13440 LONNIE WASCOM APT 2B  
WALKER, LA 70785-0000

12291

EDDIE MELANCON  
45037 RIVERSIDE EST  
SAINT AMANT, LA 70774-0000

12261

MARK NOEL  
2440 OAK MANOR CT  
BATON ROUGE, LA 70810-0000

12715

THADD/ELENA LAVIGNE  
30413 LAFLEUR RUE  
WALKER, LA 70785-0000

12787

GARY MILLIGAN  
30451 CHATTELLE AVE  
WALKER, LA 70785-0000

5906

AMANDA & MICHAEL OLSON  
33830 CYPRESS BLUFF DRIVE  
DENHAM SPRINGS, LA 70706-0000

12285

GERALD LEBLANC  
PO BOX 1806  
ALBANY, LA 70711-0000

1687

MIKE/STEPHANIE/MELISSA/MARK  
MISTRIC  
15981 RUTH DR  
WALKER, LA 70785-6218

12274

PAUL PAYTEN  
11111 N HARRELLS FERRY RD  
BATON ROUGE, LA 70816-0000

1495

A J LEE  
PO BOX 311  
LIVINGSTON, LA 70754-0000

12248

LEONARD/MORALES MORALES  
12989 SUTCLIFF DR  
WALKER, LA 70785-0000

12712

RITA PINION  
30436 LAFLEUR RUE  
WALKER, LA 70785-0000

12276

ANDREW LEE  
14145 OLD GENESSEE RD LOT 6  
TICKFAW, LA 70466-0000

12298

TIMEKIA MOSLEY  
2853 CROWN ST  
SHREVEPORT, LA 71107-0000

12265

MARY KEAYE QUONTERS  
78 WELDON CIRCLE  
PONCHATOUA, LA 70454-0000

12283

TIFFANY MARTELLO  
11490 TRUAX RD  
DENHAM SPRINGS, LA 70726-0000

12297

JESSICA MULLINS  
18855 SCIVICQUE LANE  
PORT VINCENT, LA 70726-0000

12782

STEPHANIE/BECKY CROXLON  
RABALAIS  
14333 CORBIN PLACE  
WALKER, LA 70785-0000

12752

MICKEY/DARLA MARTIN  
30325 JACKSON ST  
WALKER, LA 70785-0000

12271

MIKE MURPH  
14186 LOCKHART LANE  
WALKER, LA 70785-0000

12719

JAMES/STEPHANIE ROBINSON  
30393 LAFLEUR RUE  
WALKER, LA 70785-0000

11450

STEVEN/BONNIE MCCASKILL  
14310 MACKENZY WAY  
WALKER, LA 70785-0000

12704

MARYLAND MURRAY  
1755 AVOCADO DR  
SHREVEPORT, LA 71107-0000

12195

FLOYD ROULE  
29538 GAYLORD RD  
WALKER, LA 70785-0000

12258  
LANCE SANDERS  
1067 HOLLINGSWORTH DR  
LAKE, MS 39092-0000

12251  
MARILYN SPANGLER  
12465 DEER FIELD DR  
WALKER, LA 70785-0000

1413  
VANDA TIDWELL  
30526 N WILLOW  
LIVINGSTON, LA 70754-0000

4838  
PAUL SCHNEIDER  
15212 LOCKETT LN  
BATON ROUGE, LA 70810-0000

12723  
JASON/MEREDITH ST PIERRE  
14321 MADISON OAKS  
WALKER, LA 70785-0000

12775  
RICHARD TROSCLAIR  
30410 JACKSON ST  
WALKER, LA 70785-0000

12852  
PAUL SCHNEIDER  
10305 AIRLINE HWY  
BATON ROUGE, LA 70816-0000

12269  
JEFF STALLION  
1858 GEN BEAUREGUARD  
BATON ROUGE, LA 70810-0000

12273  
WILLIE UNDERWOOD  
176 WADE LANE  
GREENSBURG, LA 70441-0000

1765  
JUSTIN SEALS  
32825 CYPRESS BLUFF DR  
DENHAM SPRINGS, LA 70726-0000

6071  
DALE STEIB  
10305 AIRLINE HIGHWAY  
BATON ROUGE, LA 70816-0000

4823  
IVOR VAN HEERDEN  
PO BOX 874  
LIVINGSTON, LA 70754-0000

11669  
ALEXANDER SHEFFIELD  
5420 CORPORATE BLVD SUITE 303  
BATON ROUGE, LA 70808-0000

12268  
MADISON STEWART  
8558 SARA PKWY  
BATON ROUGE, LA 70807-0000

12781  
MARK/KELLY VETTER  
14336 CORBIN PLACE  
WALKER, LA 70785-0000

1465  
SHARLA SHELTON  
39246 CANE MARKET RD  
WALKER, LA 70785-0000

12136  
BRIAN SULLIVAN  
SEMS INC - 11628 S CHOCTAW DR  
BATON ROUGE, LA 70815-0000

12726  
RYAN/KIMBERLY WADENPFICHL  
14337 MADISO OAKS  
WALKER, LA 70785-0000

12783  
DAVID SHEPARD  
2121 LUNN ST  
SHREVEPORT, LA 71107-0000

12779  
SEAN SURYUAS  
14344 CORBIN PLACE  
WALKER, LA 70785-0000

1437  
GERALD WALTER  
6044 CLEMATIS  
BATON ROUGE, LA 70803-0000

12270  
DONDRAY SHEPPHARD  
81 ELLIS H LANE  
GREENSBURG, LA 70441-0000

12786  
LESA THIBODEAUX  
14327 MACKENZY WAY  
WALKER, LA 70785-0000

12292  
STANLEY WATTS  
PO BOX 789  
LIVINGSTON, LA 70754-0000

12718  
BRANDON/CANDY SIBLEY  
30409 LAFLEUR RUE  
WALKER, LA 70785-0000

12718  
NICKEY/CRYSTAL THOMAS  
30390 LAFLEUR RUE  
WALKER, LA 70785-0000

12280  
STEVE WESTRIDGE  
6227 WESTRIDGE  
BATON ROUGE, LA 70817-0000

12295  
DEXTER SOLOMON, SR  
1500 MCDANIELS RD  
AMITE, LA 70422-0000

12850  
DAVID THORLEY  
WASTE MANGEMENT INC/1001 FANNIN !  
HOUSTON, TX 77022-0000

1388  
RICKY WHEAT  
19829 HWY 42  
LIVINGSTON, LA 70754-0000

12701

SHANA WHITE  
14335 MACKENZY WAY  
WALKER, LA 70785-0000

12260

ASHLY WHITNEY  
35981 SARASOTA AVE  
DENHAM SPRINGS, LA 70706-0000

12286

MALCOLM WILLIAMS  
321 MARK DR  
DENHAM SPRINGS, LA 70726-0000

12714

JAMIE/DAMION WILLIAMS  
30426 LAFLEUR RUE  
WALKER, LA 70785-0000

10920

JILL WITKOWSKI  
6329 FRERET ST  
NEW ORLEANS, LA 70118-0000

12793

JILL WITKOWSKI  
6329 FRERET ST  
NEW ORLEANS, LA 70118-0000

12296

DEBORAH WRIGHT  
1406 LOUISIANA AVE  
BAKER, LA 70714-0000

12853

EARLE WRIGHT  
6310 WESTWIND AVE  
BATON ROUGE, LA 70817-0000

12785

MARIE YOUNG  
2049 MATTIE ST  
SHREVEPORT, LA 71107-0000

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Mr. David Mason, District Manager  
Waste Management of Louisiana, LLC  
29375 Woodside Drive  
Walker, Louisiana 70785