

ADEQ

ARKANSAS
Department of Environmental Quality

September 19, 2014

Eco-Vista, LLC Class 1 Landfill
Attn: Mr. David Conrad
2210 Waste Management Drive
Springdale, AR 72762

RE: Issuance of Final Permit for Eco-Vista, LLC Class 1 Landfill
Permit No: 0290-S1-R3; AFIN: 72-00144
Document No: 66522; Cross Reference No: 66157

Dear Mr. David Conrad:

Enclosed is a permit authorizing the construction, operation, and maintenance of the Eco-Vista, LLC Class 1 Landfill solid waste landfill facility as described in your application submitted on January 15, 2013, and subsequent documentation as referenced in the permit. The permit number for the facility is 0290-S1-R3. The decision to issue the permit is based upon 1) the information contained in the permit application; 2) other materials submitted by the applicant; 3) written comments received during the designated 30-day public comment period (received from the facility only).

The permit is granted subject to the terms and conditions specified in the permit. The initial amount of financial assurance required is \$7,694,146.00 for the facility. Acceptable mechanisms for financial assurance include a surety bond, collateral bond (supported by a letter of credit, securities or cash), or other mechanisms as set forth in Chapter Fourteen of Regulation Number 22. The instruments used must be in the exact form set forth in Regulation Number 22 and must be filed with the Department before the permit can become effective. The purpose of the financial assurance is to ensure an environmentally sound closure of the site upon conclusion of disposal operations and acceptable post closure care. Please review all terms and conditions of the permit to ensure compliance with all applicable requirements.

All persons submitting written comments during the thirty (30) day public comment period, and all other persons entitled to do so, may request an adjudicatory hearing and Commission review on whether the decision of the Director should be reversed or modified. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201 within thirty (30) calendar days of the date of issuance of this final permit decision as provided in Reg. 8.211(B)(1). If you have any questions about filing the request, please call the Commission Secretary at 501-682-7890.

Thank you for your cooperation on this matter. If you have any questions, or if we may be of service, please feel free to contact the Solid Waste Management Division at (501) 682-0602.

Sincerely,



Benjamin R. Jones
Chief - Solid Waste Management Division

Enclosures: Permit
Permit Statement of Basis

cc: Brad Fureigh, Terracon
Justin Sparrow, District Field Inspector
Heidi Love, Inspector Supervisor, SWMD
Susan Speake, Programs Branch Manager, SWMD

PERMIT

**FOR THE CONSTRUCTION AND OPERATION OF A
CLASS 1 SOLID WASTE DISPOSAL FACILITY**

ISSUED BY

**STATE OF ARKANSAS
DEPARTMENT OF ENVIRONMENTAL QUALITY
SOLID WASTE MANAGEMENT DIVISION**

Class 1 Landfill

Permit Number	0290-S1-R3
AFIN	72-00144
Effective Date	October 1, 2014
Permit Owner & Address	Eco-Vista, LLC 2210 Waste Management Drive Springdale, AR 72762
Facility Site Name & Address	Eco-Vista, LLC 2210 Waste Management Drive Springdale, AR 72762
Location	Approximately two and one half miles south of Tontitown, Arkansas in Portions of Sections 14 and 23, Township 17 North, Range 31 West, Washington County, Arkansas
Permitted Landfill Area	+/- 147 acres
Property Area	+/- 609 acres
Landfill Capacity	15,990,000 cubic yards (This includes the volume of solid waste and any daily or intermediate soil cover)
Financial Assurance	\$7,694,146.00
Design Engineer/Consultant	Terracon Consultants, Inc. 25809 Interstate 30 South Bryant, Arkansas 72022 Chimney Rock Consulting 7529 Counts Massie Road North Little Rock, Arkansas 72113

This permit authorizes the operation of the solid waste disposal facility as set forth in the permit applications by Eco-Vista, LLC, hereinafter called "owner" or "permittee" and received by the Department of Environmental Quality initially on November 16, 1979. A summary of the subsequent major permit actions at this facility to date are as follows:

Summary of Previous Major Permit Actions

Permit Number	Date Issued	Permit Action
0123-SR-2	Sept 20, 1991	Site 3 permitted for waste disposal
0162-SR-2	Sept. 20, 1991	Site 4 permitted for waste disposal
0290-S1	July 31, 1997	North and South Phase permitted for waste disposal, Supersedes 0123-SR-2 and 0162-SR-2
0290-S1-R1	April 11, 2000	Permit transfer to new owner
0290-S1-R2	July 14, 2006	Lateral expansion – expansion to 10,490,000 cubic yards
0290-S1-R2	July 21, 2006	Minor modification – 10% expansion to 11,086,000 cubic yards

This permit modification is a lateral expansion to the Eco-Vista, LLC, Class 1 Landfill. This major permit modification was completed through a series of documents initially furnished by the applicant on January 15, 2013 and subsequent documentation supplied by the applicant up to the point of draft permit issuance. A compilation of pertinent permitting submittals is filed in ADEQ-SWMD Document Identification No: 65990. The facility expansion areas previously designated as cells 1-8 are expanded through this permitting action to also include additional cells 9-12. This expansion increases the total landfill footprint of disposal area to 147 acres and a total disposal airspace volume of 15,990,000 cubic yards. On the effective date, this permit supersedes all prior solid waste Class 1 landfill permits issued by the Department of Environmental Quality, hereinafter called "Department" including each permit listed in the table above. This permit is issued pursuant to the provisions of the Arkansas Solid Waste Management Act (Arkansas Code Annotated 8-6-201 et seq.) as amended, hereinafter called the "Act;" Regulation Number 22, Arkansas Solid Waste Management Rules, as adopted by the Arkansas Pollution Control and Ecology Commission on April 26, 2008, hereinafter called "Regulation 22;" all other applicable rules and regulations and the following terms and conditions:

PERMIT CONDITIONS

1. This permit is issued in reliance upon the statements and representations made in the application, operating narrative, plans, specifications, correspondence, and other related documents. The Department bears no responsibility for the adequacy or proper functioning of the disposal facility. Nothing contained herein shall be construed as releasing the permittee from any liability from damage to persons or property due to the installation, maintenance, or operation of the disposal facility or any act of the permittee, or the permittee's employees or agents.
2. The disposal facility shall be constructed, operated and maintained in accordance with the final plans, specifications and operation narrative as approved by the Department and in compliance with applicable provisions of the Act, Regulation 22, and all other applicable rules and regulations.

3. At all times the disposal facility shall be maintained in good condition and operations shall be conducted by licensed, qualified on-site operators holding the appropriate license in accordance with Regulation Number 27, Licensing of Solid Waste Management Facilities and Illegal Dump Control Officers.
4. This permit may be revoked or modified whenever, in the opinion of the Department, the facility is no longer in compliance with the Act, Regulation 22, or other applicable rules and regulations. Except where expressly authorized by the Department, this permit shall not relieve the permittee, or the permittee's employees or agents, from compliance with the provisions of the Act and Regulation 22.
5. The Department may issue modifications or amendments to this permit governing the design, operation, maintenance, closure or post-closure of the facility during the term of this permit. Such modifications or amendments shall be attached to this permit and shall be fully maintained and enforceable as a condition or conditions of this permit.
6. The Department has received an initial permit fee from the permittee. Annual permit fees due thereafter shall be assessed in accordance with Regulation Number 9, Fee Regulation. The facility shall also be responsible for quarterly payments of other landfill disposal fees as required under Regulation 11, Regulations for Solid Waste Disposal Fees; Landfill Post-Closure Trust Fees and Recycling Grants Program. Failure to pay annual fees or quarterly payments when due may result in revocation of this permit.
7. Transactions that affect the ownership of the facility must be fully disclosed to the Department.
 - a. For purposes of evaluating whether a change in ownership occurs, ownership or control may result from a change in the equity of the permittee of five percent (5%) or more.
 - b. If applicable, the permittee shall submit to the Department annual and quarterly reports required by the Securities and Exchange Commission (SEC) that provide information regarding legal proceedings in which the permittee has been involved in order to determine whether any change in ownership or control of the operation of this landfill has occurred.
 - c. A permit transfer will not be required when a change in ownership or control of the facility is among the persons and/or entities previously disclosed to the Department in the submitted Disclosure Statement or similar disclosure.
8. The Department, its employees, agents, or any authorized person shall have the right to enter the property at any time for any reason as set out in Regulation 22 for the purposes of, including but not limited to taking samples, reviewing the operating record, inspecting the facility, and perform other enforcement action or engineering review without interference or delay from the permittee.
9. This permit authorizes an approximately 609 acre Class 1 Landfill facility with approximately 147 acres designated as the authorized waste disposal footprint as depicted on the approved plans and drawings and in accordance with permit application and supplemental

application materials and the conditions of this permit. The boundaries of the facility or landfill, and the final grades, or elevations of the landfill shall not be exceeded at any time whether inadvertent or intentional. This permit may be placed in void status when the fill elevations are reached within compliance with approved plans, the facility is closed according to approved plans, the facility has completed post-closure care in accordance with the provisions of approved plans and Regulation 22, and when the facility has completed any necessary corrective action which may be on-going or become necessary during the permitted active, closure, or post-closure phase.

10. The approved permit plans for the facility are as follows:

Bottom Grading Plan – North 1 Acre Liner Area	Drawing 3 of 9 Doc. ID# 27129
Bottom Grading and Liner Plan-North and South Phase	Drawing 2 of 21 Doc. ID# 5260
Leachate Collection/Bottom Liner Details-North and South Phase	Drawing 14 of 21 Doc. ID# 5260 Drawing 15 of 21 Doc. ID# 5260 Drawing 16 of 21 Doc. ID# 5104 Drawing 19 of 21 Doc. ID# 5104 Drawing 20 of 21 Doc. ID# 5260 Drawing 21 of 21 Doc. ID# 5104
Final Grading Plans	Drawing 5 of 9 Doc. ID# 27129 Figure 5 of 14 Doc. ID# 34262
Stormwater Control Plan-Site 3, Site 4, North and South Phase	Figure 6 of 14 Doc. ID# 34262
Liner Details-Minor Mod Area	Figure 8 of 14 Doc. ID#34262
Leachate Collection System Details-Minor Mod Area	Figure 9,10 and 11 of 14 Doc. ID# 34262
Final Cover Plan-Site 3, Site 4, North and South Phase	Figure 12 of 14 Doc. ID# 34262
Surface Water Management Details-North and South Phase	Figure 13 of 14 Doc. ID# 34262
North 1 Acre Liner/Leachate Collect./Leak Detect. System Details	Drawing 8a of 9 Doc. ID# 28042 Drawing 9 of 9 Doc. ID# 27129

Subgrade Grading Plan-Cells 1-8	Drawing 3 of 21 Doc. ID# 30273
Top of Primary Liner Grading Plan-Cells 1-8	Drawing 4 of 21 Doc. ID# 30273
Liner System Details-Cells 1-8	Drawing 12 of 21 Doc. ID #30273
Leachate Collection System Details-Cells 1-8	Drawing 13 of 21 Doc. ID # 30273 Drawing 14 of 21 Doc. ID # 30273 Drawing 15 of 21 Doc. ID # 30273
Final Cover System Details-Cells 1-8	Drawing 16 of 21 Doc. ID # 30273
Surface Water Management Details-Cells 1-8	Drawing 17 of 21 Doc. ID # 30273 Drawing 18 of 21 Doc. ID # 30273
Erosion and Sediment Control Details-Cells 1-8	Drawing 19 of 21 Doc. ID # 30273
Landscaping Plan and Details-Cells 1-8	Drawing 20 of 21 Doc. ID # 30273 Drawing 21 of 21 Doc. ID # 30273
Leachate Force Main	Drawings 3-26 Doc. ID #57568
Subgrade Grading Plan- Cells 9-12	Drawing 3 of 18 Doc. ID # 65990
Top of Primary Liner Grading Plan Cells 9-12	Drawing 4 of 18 Doc. ID# 65990
Fill Sequence Plan	Drawings 5-6 of 18 Doc. ID# 65990
Final Cover Grading Plan	Drawing 7 of 18 Doc. ID# 65990
Stormwater Management Plan	Drawing 8 of 18 Doc. ID# 65990
Liner System Details Cells 9-12	Drawing 11 of 18 Doc. ID# 65990
Leachate Collection Details Cells 9-12	Drawings 12-14 of 18 Doc. ID# 65990
Final Cover System Details Cells 9-12	Drawing 15 of 18 Doc. ID# 65990
Stormwater Management Details Cells 9-12	Drawings 16-18 of 18 Doc. ID# 65990
Landfill Gas Management System	Figure A Doc. ID# 65990

11. The facility is permitted for 15,990,000 cubic yards of solid waste disposal including daily and intermediate cover material. Of the 15,990,000 cubic yards of solid waste disposal capacity 6,586,000 is contained within Site 3, Site 4, and the North Phase and South Phase disposal areas. 9,404,000 cubic yards of solid waste disposal capacity is contained within Cells 1 through 12.
12. The permitted waste disposal area is 147 acres. This area includes the 66-acre permitted waste disposal boundary as shown on Drawing 2 of 9 of the set of drawings assigned Document Identifier 27129, the 46 acre area indicated in the legal description included on Drawing 2 of 21 of the set of drawings assigned Document Identifier 30273 and the 33.8 acres depicted on Drawing 2 of 18 of the set of drawings contained in Document Identifier 65990.
13. The following alternative bottom liner system configuration has been approved for the North 1 Acre Liner Area (Document Identifier 27129). The bottom liner system (including the bottom sideslopes) has been listed from bottom to top.
 - A 24-inch thick compacted soil layer with hydraulic conductivity of less than 1×10^{-7} cm/s
 - A 60-mil thick high density polyethylene (HDPE) geomembrane
 - A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet
 - A geosynthetic clay liner
 - A 60-mil thick high density polyethylene (HDPE) geomembrane
 - A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet
 - A 12-inch thick protective soil cover layer

This alternative bottom and bottom sideslope liner configuration has been approved in conjunction with the Liner System Equivalency Demonstration (Document ID# 28042).

14. The following bottom liner system configuration is approved for Cells 1-8 as shown on Drawing 12 of 21, Document Identifier 30273 and Cells 9-12 as shown on Drawing 11, Document Identifier 65990. The bottom liner system (including the bottom sideslopes) has been listed from bottom to top.
 - A 24-inch thick compacted soil layer with hydraulic conductivity of less than 1×10^{-7} cm/s
 - A 60-mil thick textured high density polyethylene (HDPE) geomembrane
 - A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet
 - A geosynthetic clay liner
 - A 60-mil thick textured high density polyethylene (HDPE) geomembrane

- A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet
- A 12-inch thick protective soil cover layer (Cell Floor <10% grade - hydraulic conductivity of greater than or equal to 1×10^{-3} cm/s; Bottom Sideslopes >10% grade - hydraulic conductivity of greater than or equal to 1×10^{-5} cm/s).

This alternative bottom and bottom sideslope liner configuration was approved in conjunction with the Liner System Equivalency Demonstration (Appendix C10 of Volume 4 of 4, Document ID#30273).

15. The following final cover system configuration is approved for Cells 1-8 as shown on Drawing 16 of 21, Document Identifier 30273 and Cells 9-12 as shown of Drawing 15 of 18, Document Identifier 65990. The final cover system has been listed from bottom to top.

- A 6-inch Gas Venting Layer consisting of soil with a minimum hydraulic conductivity of 1×10^{-3} cm/s or greater placed directly over the last lift of waste. If an active gas collection system is required and approved for this facility, this layer will be replaced by a minimum 12-inch thick intermediate cover layer.
- A geosynthetic clay liner
- A 40-mil thick textured linear low density polyethylene (LLDPE) geomembrane
- A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet
- 12-inch Protective Cover Soil Layer
- 6-inch Vegetative Soil Layer

This alternative final cover system configuration has been approved in conjunction with the Alternate Final Cover System Equivalency Demonstration (Appendix D6 of Volume 4 of 4, Document ID#30273 and Alternative material specification Demonstration 55875).

16. The permittee shall implement the Hazardous and Unauthorized Waste Exclusion Plan presented in Appendix L of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Hazardous and Unauthorized Waste Exclusion Plan, the facility shall fully meet all requirements of Reg.22.412 regarding the exclusion of all unauthorized waste streams. Special Materials as identified in Regulation 22 do not require written authorization from the Department, provided the materials that are not specifically identified by the Special Materials section must be characterized by the generator of the waste prior to acceptance for disposal in the landfill in accordance with the facility's written Hazardous and Unauthorized Waste Exclusion program.
17. Bulk or non-containcrized liquid waste may not be disposed in the landfill. 40 CFR 258.28(c)(1) and 22.102 defines liquid waste as any waste material that is determined to contain "free liquids" as defined by Method 9095B (Paint Filter Liquids Test), included in

“Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (EPA Publication SW-846).

18. The facility is authorized to utilize synthetic tarps for daily cover if the material selected is of sufficient weight and durability to control disease vectors, fires, odors, blowing litter, and scavenging. The facility may not use alternate daily cover for more than six consecutive days. Upon notification from the Department the authorization to utilize alternate daily cover may be withdrawn or revoked at any time the Department determines that the alternate daily cover is not effective in controlling disease vectors, fires, odors, blowing litter and scavenging. The facility must place soil intermediate cover in compliance with Reg.22.413.
19. The permittee shall implement the Explosive Gas Monitoring Plan presented in Appendix M of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Landfill Gas Monitoring Plan, the facility shall fully meet all requirements of Reg.22.415 regarding the control of explosive gases. The facility shall monitor each of the 16 gas monitoring probes detailed in the approved Landfill Gas Monitoring Plan and within all structures at the facility on a quarterly basis. The results shall be submitted to the Department within 30 days of each monitoring event.
20. The permittee shall implement the requirements detailed in the Operating Plan and Narrative presented in Appendix K of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Operating Plan and Narrative, the facility shall fully meet all operating requirements of Regulation 22 unless specifically addressed by a permit condition.
21. This permit authorizes one (1) active disposal area at the facility per Section 22.411 (c) of Regulation 22. A second working face may be approved in writing by the Department for the purpose of the disposal of wastes which may be impacted by non-routine activities.
22. The disposal facility shall provide litter control fences to help control blowing litter, and the disposal facility shall comply with Regulation 22.411(g).
23. The facility shall implement and maintain surface water controls as defined in Regulation 22.411(h). Measures to control and prevent surface water from running through or into the active portion as defined in Regulation 22.102 and measures to prevent liquids from flowing out of the active portion as defined in Regulation 22.102 shall be constructed and maintained as required by Regulation 22.418.
24. Appropriate NPDES construction/storm water permit(s) shall be obtained for storm water discharges from the landfill site and borrow sites. A Storm Water Pollution Prevention Plan (SWPPP), which outlines erosion and sediment control measures, shall be prepared and implemented in accordance with applicable NPDES requirements. A copy of the SWPPP shall be maintained on-site for reference by operating staff.
25. The Action Leakage Rate for the facility including the North Phase, South Phase, and Cells 1-12 is 150 gallons per acre per day. The Action Leakage Rate is based on the calculations presented in Appendix Q of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. The approved contingency plan for the

Action Leakage Rate associated with the North and South Phases has Solid Waste Management Division Document Identifier 18104. The approved contingency plan for the Action Leakage Rate associated with Cells 1-12 has been included in the submittal having Solid Waste Management Division Document Identifier 65361.

26. The permittee shall implement the Construction Quality Assurance Plan presented in Appendix P of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Construction Quality Assurance Plan, the facility shall fully meet all requirements of Reg.22.425, 428, and 429. A summary of construction specifications was provided through email dated June 17, 2014, See Document ID 65990. The permittee shall also implement the Revised CQA Plan as necessary for the Final Cover System presented in Document 55875 for the Site 3 and 4 area closure.
27. The permittee shall not implement the Class 4 "Pinnacle Blasting Plan" as proposed in the Operating Plan. A revised blasting plan shall be submitted for approval of ADEQ which shall contain necessary calculations and demonstrations to verify stability of the subsurface based on the impact of specified blasts.
28. The permittee shall implement the Closure and Post Closure Care Plan presented in Appendix R of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Closure and Post Closure Care Plan, the facility shall fully meet all requirements of Reg.22.1301 and Reg.22.1302. The post closure maintenance period for this facility shall be a minimum of 30 (thirty) years starting on the date the Department accepts closure of the facility. The length of the post closure period may be decreased or increased by the Director in accordance with Regulation 22.1302(c)(4).
29. The initial total amount of financial assurance is \$7,694,146.00. Of this amount, \$5,834,464.00 will be required for closure costs and \$1,859,682.00 will be required for the post-closure care costs. This amount shall be subject to annual adjustments and may be increased at the discretion of the Department based upon the estimated cost for a third party to close the largest area requiring final cover during the active life of the facility and the cost for a third party to perform post closure care.
 - a. The instruments used must be in one of the forms set forth in Regulation 22 or as otherwise approved by the Department.
 - b. A portion or all of the financial assurance may be held by the Department beyond the time of cessation of disposal operations at the site to ensure satisfactory closure and post closure care in accordance with Regulation 22.
 - c. No more than 36 acres of active or interim covered disposal area shall be open in the landfill expansion area. This requirement shall be addressed each year in the facility Annual Engineering and Inspection Report.
 - d. Cell construction shall be performed in the sequence outlined in the approved facility design plans (see Condition 10) and in closure construction shall comply with the

facility closure plan including closure sequencing as presented in the closure plan reference drawings, Figures 1-3.

30. The permittee will install an additional 60-mil High Density Polyethylene Geomembrane under the entire leachate collection sump and the entire leachate collection trench for each cell (Cells 1-12 of the expansion area). The second geomembrane shall be installed and tested to the same standards as the primary liner material.
31. The facility shall measure and record the fluid accumulation in each leachate collection system and leachate detection system sump and storage tank each day except Sundays, and State of Arkansas observed holidays. The facility shall, on a daily basis, measure and record the amount of liquid removed from Cells 1-12 including the leachate collection and leak detection system sumps. The results of the leak detection system sump fluid accumulation measurements and the amount of liquids removed from the leak detection system shall be utilized in the calculation of the leak detection system flow rate. The facility may utilize a three day average in determining compliance with the action leakage rate. The equipment and methods for determining the fluid removed from the leachate collection and leak detection system in Cells 1-12, shall be reviewed and calibrated when any modifications are made to the leachate collection and leak detection system. Documentation of the calibration shall be submitted within 30 days of making a modification to the leachate collection and leak detection system. Upon construction of a new landfill cell, documentation of the calibration shall be submitted with the construction quality assurance certification report.
32. The facility shall collect samples from the leak detection system and leachate collection system sumps monthly. The samples shall be analyzed for chloride, ammonia, specific conductance, and pH. In addition the facility shall collect samples from the leak detection and leachate collection system sumps annually and test the samples for iron, manganese, total organic carbon, and the constituents listed in Appendix 1 of Regulation 22. While the facility is in assessment monitoring or corrective action, every three years the facility will analyze the annual leak detection and leachate collection samples for all Regulation 22 Appendix 2 parameters. The results of the sampling detailed above shall be submitted to the ADEQ directly from the analytical testing laboratory and shall be included in the groundwater monitoring reports for the facility.
33. The permittee shall comply with the air criteria requirements of Regulation 22.416, and any Air Permit issued to the disposal facility.
34. The permittee shall furnish the Department annual engineering inspection reports in accordance with Regulation 22.423.
35. The groundwater monitoring system will be monitored per the standard provisions of Regulation 22 and shall consist of a sufficient number of wells or sampling points, installed at appropriate locations and depths to yield ground water samples that:
 - a. Provide ground water quality passing the relevant point of compliance downgradient of the solid waste unit, facility, or practice as defined by Regulation 22. The downgradient monitoring system must ensure detection of ground water contamination in the uppermost aquifer.

- b. Provide background that has not been affected by any solid waste unit, facility, or practice as defined by Regulation 22.

The monitoring system shall be installed, operated and maintained in accordance with the approved design specifications throughout the active life of the facility and throughout the post-closure care period.

- 36. All groundwater monitoring at the site as described in this Permit, the approved Groundwater Sampling and Analysis Plan (GWSAP), and the Corrective Action Monitoring Program will follow the provisions detailed within Regulation 22 except for the following approved alternatives:
 - a. Monthly sampling and reporting of indicator parameters as detailed in Condition 38a and 40.
 - b. Decreased well sampling during the 2nd and 4th quarters as detailed in Condition 38b.
 - c. Decreased frequency of Appendix 2 sampling as detailed in Condition 38c.
 - d. Inclusion of Leak Detection System (LDS) and Leachate Collection System (LCS) monitoring results within groundwater monitoring reports as detailed in Condition 40.
- 37. Groundwater Monitoring System:
 - a. The initial groundwater monitoring system for the Eco-Vista Class 1 landfill consists of 23 wells (MW-1N, MW-2N, MW-3N, MW-7N, MW-8N, MW-10N, MW-11N, LGW-2, LGW-3, LGW-4, LGW-5, LGW-6, LGW-7, LGW-8R, LGW-9, LGW-10, LGW-14R, proposed monitoring wells MW-15, MW-16, MW-17, MW-19, MW-20, and MW-21). The Nature and Extent wells are currently monitored under the Corrective Action Monitoring Program for the site and may be added to the standard groundwater monitoring system in the future.
 - b. Any modification of the groundwater monitoring system will follow the provisions of Regulation 22. Wells LGW-1, MW-4N, and MW-5N will be decommissioned as the landfill cells at the well locations are constructed.
- 38. The groundwater monitoring system will be monitored per Regulation 22 and the following:
 - a. Monthly Indicator Parameter Sampling: Wells LGW-2, LGW-3, LGW-4, LGW-5, LGW-6, LGW-7, LGW-8R, LGW-9, LGW-10, LGW-14R, MW-7N, MW-15, MW-16, MW-17, and MW-19 shall be sampled monthly for the following indicator parameters: ammonia, chloride, pH, and specific conductance. Groundwater elevations will be measured prior to sampling.
 - b. Quarterly Sampling: After collection of baseline pre-expansion groundwater quality in wells MW-15, MW-16, MW-17, MW-19, MW-20, and MW-21, all 23 monitoring wells at the site shall be sampled quarterly as follows:

- i.) During the 1st and 3rd quarters all monitoring wells shall be sampled for the full suite of parameters on the Assessment Monitoring Constituents (AMC) list (defined in Regulation 22.1205(b)), plus Iron (Fe), Manganese (Mn), and Total Organic Carbon (TOC).
 - ii.) During the 2nd and 4th quarters any facility monitoring well which had: 1) a parameter exceedance of the established Ground Water Protection Standard (GWPS) (defined in Regulation 22.1205(h)) during the previous quarter or 2) a Statistically Significant Increase (SSI) during the monthly indicator sampling since the last full AMC list sampling shall be sampled for the full suite of parameters on the AMC list (defined in Regulation 22.1205(b)), plus Fe, Mn, and TOC.
 - iii.) Should the facility be authorized by the Department to return to Detection Monitoring per Regulation 22, the AMC parameter list will be replaced by Appendix 1 of Regulation 22 plus Fe, Mn, and TOC.
 - c. Appendix 2 Sampling: Per Regulation 22, Appendix 2 sampling will occur while the facility is in Corrective Action or Assessment Monitoring.
 - i.) All monitoring wells which had an exceedance of the GWPS the previous calendar year shall be sampled for the full list of Appendix 2 parameters;
 - ii.) All 23 monitoring wells shall be sampled for the full list of Appendix 2 parameters every three years with the first sampling event to occur in 2015, 2018, 2021, etc.
 - d. Corrective Action Sampling: While the facility is within Corrective Action, Nature and Extent wells shall be monitored in accordance with a Department approved Corrective Action Monitoring Program for the facility.
39. The statistical analysis of groundwater sampling results will follow Regulation 22 and the approved Groundwater Sampling and Analysis Plan. Below are items from Regulation 22 included here for clarification.
 - a. Background Groundwater Quality: After collection of baseline pre-expansion groundwater quality in monitoring wells MW-15, MW-16, MW-17, MW-19, MW-20, and MW-21, a background data set will be created for the whole site and approved by SWMD for use in statistical analysis. The background data set will be from wells confirmed to be unaffected by leakage (including landfill gas) from the facility.
 - b. Statistically Significant Increase: Per Regulation 22.1204(c) the facility will determine if a Statistically Significant Increase (SSI) has occurred based on results of the most recent sampling event during detection monitoring. To assist in characterizing the groundwater at the site and per Regulation 22.1203(k), SSIs will be determined at each well even if the facility is in assessment monitoring or corrective action status.

- c. Statistical Methodologies: All ground water statistical methodologies will be performed in a manner that complies with Regulation 22 and the *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* by EPA dated March 2009 (EPA 530-R-09-007). Any statement or methodologies within the current groundwater sampling and analysis plan (GWSAP) that do not meet these criteria shall not be considered authorized by the Department. A revised GWSAP shall be submitted to the Department for review within 60 days of the effective date of this final permit.
40. The reporting of groundwater monitoring results will follow Regulation 22 with the following additions:
- a. Monthly Indicator Parameters Report: A monthly indicator parameters report will be due at the end of each month following the month to which the report pertains and will include:
 - i.) Analytical data from that month's indicator sampling of groundwater, the leak detection system, and the leachate collection system. Groundwater elevations should also be included.
 - ii.) List of calculated SSIs for all monthly results from the groundwater monitoring wells.
 - iii.) Graphs for each SSI, presenting the parameter at the location 1) over the past year and 2) since monthly monitoring began.
 - iv.) Database printout of all monthly sampling analytical results since beginning of monthly indicator sampling.
 - v.) Daily volume and rate data collected from the leak detection system and the leachate collection system since the last report.
 - vi.) Discussion of all results obtained from the groundwater monitoring wells.
 - b. Groundwater Monitoring Reports: The groundwater monitoring reports (GWMR) will follow Regulation 22 with the addition of:
 - i.) A summary discussion of the monthly indicator sampling results since the last GWMR;
 - ii.) A summary discussion of the Corrective Action Monitoring Plan results since the last GWMR.
 - iii.) Analytical results of the leak detection system and leachate collection system sampling for expanded parameters (AMC list or Appendix 2 parameters) after each of the expanded sampling events.
41. Regulation 22.1103(f) requires any new monitoring well(s) added to the ground water monitoring system shall be certified by a supervising professional and must comply with

Regulation 22.1202(c). Regulation 22.1202(e) – “The groundwater monitoring system must be certified by a qualified ground water scientist or approved by the Director. Within fourteen (14) days of submitting this certification [to ADEQ], the permittee must notify the Director this monitoring system certification has been placed in the operating record.”

Monitoring well certification shall confirm all monitoring system components have been constructed and installed in an acceptable manner following appropriate ASTM D 5092 or EPA-530-R-93-017 well construction protocols per Regulation 22.1103.

42. The permittee shall comply with Regulation 22.1103(a), which requires “following construction, each well shall be developed to the degree necessary to restore formation hydraulic conductivity and insure low turbidity samples which are representative of formation ground water quality.”

Reports of replaced or decommissioned wells shall be submitted to the Department within 60 days of completion and shall be placed in the Operating Record.

43. Each monitoring well shall be sampled by qualified personnel properly trained and familiar with appropriate procedures and techniques for the collection of ground water samples.
- a. “Ground water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground water flow each time ground water is sampled” as prescribed in Regulation 22.1203(d).
 - b. Testing laboratories shall be certified by the Department per the “State Environmental Laboratory Certification Program Act (Ark. Code Ann. § 8-2-201 et Seq.)” As prescribed in Regulation 22.1203(j)(4), “Ground water analytical data submittal procedures, which shall include provisions for the direct submittal of all analytical results from the contract, or independent third party laboratory to the Department.”
44. Analysis of ground water samples shall be in accordance with the most current version of EPA Report SW-846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods or the most current EPA approved analytical method. This statement applies to the sub-provisions a - e listed below.
- a. “Volatile organic compounds analysis shall be in accordance with Method 8260 while metal analysis shall be in accordance with Method 6010 or a method from the 7000 series” or an equivalent as prescribed in Regulation 22.1204(d). Method detection limits for each parameter must be reported.
 - b. “All values above the Method Detection Limit (MDL) must be reported” as prescribed in Appendix 1(4) and as referenced in Regulation 22.1203(h)(5) and Regulation 22.1204(d).
 - c. “Other parameters of concern may be added by the Department based upon individual waste and leachate characteristics” as stated in Regulation 22.1204(a)(3). “The sampling procedures and frequency must be protective of human health and the environment” as stated in Regulation 22.1203(c). The Department may modify the analytical parameters or sampling frequency based on waste or leachate characteristics, or as needed to

determine or update representative background water quality or to investigate contaminants of potential concern as necessary to protect human health or the environment.

- d. "Analytical methods utilized should conform [to] SW-846 or the most current EPA approved analytical methods. Primary Drinking Water Standard MCLs shall be superceded by the publication of new standards from EPA" as prescribed in Regulation 22.1203(b).
 - e. "Test Methods and Detection Limits – Only Department approved test methods shall be used in the analysis of ground water monitoring parameters. Unless written approval is granted by the Department, the reporting detection limit (MDL) must be less than or equal to the values reported in EPA Report SW-846 Test Methods For Evaluating Solid Waste," Revision 6, February 2007, or current available edition as prescribed in Regulation 22.1204(d).
45. The permittee "shall develop and implement a Department approved site specific written sampling and analysis plan. The sampling and analysis plan and all reports to ADEQ required under the sampling and analysis plan shall be certified by a qualified ground water scientist. The sampling and analysis plan must include the following element – a method for statistically evaluating ground water analytical data for significant changes must be selected. The method must be tailored to fit the hydrogeology of the site. For data quality assurance purposes, the statistical evaluation should be performed by a third party independent from the contract laboratory analyzing the ground water" as prescribed in Regulation 22.1203(j)(5).

The permittee "must determine whether or not there is a statistically significant increase or decrease over background values for pH. The owner or operator must determine whether or not there is a statistically significant increase for each parameter or constituent required in the particular ground water monitoring program that applies to the landfill, as determined under Reg. 22.1204(a) or Reg. 22.1205(a)" as prescribed in Regulation 22.1203(i).

The statistical methods used to evaluate groundwater monitoring data must be in conformance with requirements of Regulation 22.1203(g), (h), and (i).

46. Ground water monitoring reports shall be submitted to the SWMD and comply with Regulation 22.1203(k). The report shall summarize the results of sampling and include a determination of whether a statistically significant increase over background values has occurred for each constituent required to be analyzed.
- a. Quarterly analytical results shall be submitted directly to the Solid Waste Management Division (SWMD) from the contract laboratory on or before March 31, June 30, September 30, and December 31.
 - b. Semi-Annual analytical results shall be submitted directly to the SWMD on or before June 30 and December 31 each year thereafter.
47. While in detection monitoring, should a statistically significant increase over established background concentration be detected for one or more of the monitored constituents, the permittee must undertake the following actions per Regulation 22.1204(c):

- a. "Must, within fourteen (14) days of this finding, place a notice in the facility operating record indicating which constituents have shown statistically significant changes from background levels, and notify the Director that this notice was placed in the operating record; and,
 - b. Must establish an assessment monitoring program meeting the requirements of Reg. 22.1205 within ninety (90) days except as provided for in paragraph(c)(3) of this section [Regulation 22.1204].
 - c. The owner or operator may demonstrate that a source other than a landfill caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground water scientist or approved by the Director and be placed in the operating record. If a successful demonstration is made and documented, the owner or operator may continue detection monitoring as specified in this section. If, after ninety (90) days, a successful demonstration is not made, the owner or operator must initiate an assessment monitoring program as required in Reg. 22.1205."
48. While a facility is in an Assessment Monitoring Program, if one or more of the assessment monitoring constituents are detected at statistically significant levels exceeding the established Groundwater Protection Standards, the permittee must undertake the following steps per Regulation 22.1205(g).
1. "Within fourteen (14) days of this finding, place a notice in the operating record identifying the assessment monitoring constituents that have exceeded the ground water protection standard and notify the Director and all appropriate local government officials that the notice has been placed in the operating record. The owner or operator also:
 - (i) Must characterize the nature and extent of the release by installing additional monitoring wells as necessary;
 - (ii) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with Regulation 22.1205(d)(2);
 - (iii) Must notify all persons who own the land or reside on the land that directly overlies any part of the contaminant migration if contaminants have migrated off-site if indicated by sampling of wells in accordance with Reg. 22.1205(g)(1); and
 - (iv) Must initiate an assessment corrective measures as required by Regulation 22.1206 within ninety (90) days; or
 2. May demonstrate that a source other than a landfill or solid waste disposal facility caused the contamination, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground water scientist or approved by the Director and placed in the operating record. If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to Regulation 22.1205, and may return to detection monitoring if the

assessment monitoring constituents are at or below background as specified in Regulation 22.1205(e). Until a successful demonstration is made, the owner or operator must comply with Regulation 22.1205(g) including initiating an assessment of corrective measures.”

Based upon the results of an Assessment of Corrective Measures per 22.1206, the permittee must proceed with Selection of a Remedy in accordance with Regulation 22.1207 and then proceed with Implementation of a Corrective Action program for the facility in accordance with Regulation 22.1208

49. Schedule if Nature and Extent Investigation is Required – If assessment monitoring constituents are detected at statistically significant levels above the groundwater protection standard per Regulation 22.1205(g), the facility shall follow Regulation 22.1205(g) and shall submit a workplan (including a schedule) for characterizing the nature and extent of the release to the Department within thirty (30) days of the statistical finding unless an extension is approved by the Department. After review, the facility will be notified of any workplan deficiencies. The facility shall respond with the necessary information within 20 days of the Department notification of deficiencies unless an extension is approved by the Department. An alternate source demonstration or alternate source demonstration workplan may also be submitted by the facility; however, the facility must comply with the remainder of Regulation 22.1205(g) until a successful demonstration is made as per Regulation 22.1205(g)(2).
50. Any statements in the operational narrative, application documents, specifications, engineering plans, and/or monitoring plans that conflict with Regulation 22, permit conditions herein, or other applicable laws and regulations shall not be considered authorized by the Department.
51. The Department’s decision to issue this permit is final for purposes of appeal as of the date indicated in the Certificate of Service below. If any provision of these conditions or the application of these conditions thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of these conditions that can be given effect without the invalid provision or application. Therefore, to this end, the provisions of these conditions are declared to be severable.

APPROVED BY: Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72218



Benjamin T. Jones, Chief
Solid Waste Management Division

9/19/2014

Date

Eco-Vista, LLC Class 1 Landfill
Permit No. 0290-S1-R3
AFIN: 72-00144
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CERTIFICATE OF SERVICE

I, Barbara J. Mathews, hereby certify that a copy of this permit has been mailed by first-class mail to David Conrad, 2210 Waste Management Drive, Springdale, AR 72762, on or before this 19th day of September, 2014.

Statement of Basis:

Permit Application Summary, Document Summary, and Rationale for Conditions

**Eco-Vista Class 1 Landfill
Permit No. 0290-S1-R3; AFIN No. 72-00144**

Permit Application Summary

This summary form consists of information submitted during the permitting process. It represents basic information from the administrative record utilized in forming recommendations from the Solid Waste Management Division. The entire file for the solid waste permit application specified below should be reviewed for complete details on the proposed facility.

Permit Application Summary	
1. Name of Applicant:	Eco-Vista, LLC
2. Type of Facility:	Class 1 landfill
3. Engineering Firm and Geotechnical Firm:	Terracon Consultants, Inc. and Chimney Rock Consultants
4. Application Date:	Original Application submitted: January 14, 2013 & August 16, 2013 Revised Application submitted: November 18, 2013, this document was recompiled with subsequent submittals into document ID: 65990
5. Site Location	General: Approximately two and one half miles southwest of Tontitown, Arkansas Specific: Portions of Sections 14 and 23, Township 17 North, Range 31 West, Washington County, Arkansas
6. Permit Area:	Total Property Area: 609.23 ± acres Permitted Landfill Area: 147 ± acres [Old Landfill – Site 3&4/North & South Phases (66 acres); 2006 lateral expansion area (46 acres); Major Modification Lateral Expansion (33.8 acres)]
Residences Within 2 Miles:	Approximately 413 dwellings within two miles of site (stated on the pre-application form). Figure 6.B Volume 2 in the application has an aerial photograph with the approximate locations of dwellings based on “revised dwelling locations and count due to better imagery dated 3/6/12”.
Water Supplies Within 2 Mile:	Approximately 68 wells (Note on Figure 3.4 Vol. 3); City water available to some homes. Well surveys and available well logs included in Vol. 3

Permit Application Summary	
Wetlands:	Small wetland area. USACE determined isolated wetland is non-jurisdictional and therefore does not require a Section 404 Permit
Geology	<p>The facility is located in the Ozark Plateau physiographic province and on the Boone Formation. The Boone Formation is a cherty limestone of Mississippian age with an approximate thickness of 280 feet in northwestern Arkansas. During weathering, the limestone dissolves, leaving a chert and clay residuum at the land surface. The overlying weathered regolith was observed to be approximately 33.5 ft. to 73.5 ft. in the proposed lateral expansion area. The Boone Formation rests conformably on the St. Joe Member and together comprises one unit known as the Boone-St. Joe Aquifer. The Boone-St. Joe rests unconformably on the Devonian-aged Chattanooga Shale.</p> <p>Dissolution of limestone in the Boone Formation has created karst terrain in northwest Arkansas. The regolith typically obscures the upper karstified surface of the bedrock. Over time the limestone is dissolved away, leaving a porous chert matrix with high permeability behind. This zone is an avenue for fast groundwater flow when saturated, fast gas flow when unsaturated, and may store large volumes of recharge water during rain events.</p> <p>Examples of karst features includes voids noted on several boring logs (most notably an eight foot void noted in MW-5R and a large void encountered in EB-19), bedrock pinnacles, and fast groundwater flow to springs (documented in the recent dye study).</p>
Soils:	Based on the Washington County Soil Survey prepared by the USDA Soil Conservation Service, soils in the vicinity of landfill belong to the Captina silt loam, Nixa cherty silt loam, Clarksville Cherty silty loam, Razort gravelly silt loam, Baxter liberty silty loam, and Johnsburg silt loam associations. A portion of these soils have been excavated and utilized in the landfilling operations. Test pits showed the site generally covered with silty clay, clay, and abundant chert.
Ground Water:	<p>The facility is located above the Boone-St. Joe Aquifer which regionally has good water quality.</p> <p>Fast groundwater flow has been documented at the site with ranges of five to several hundred feet per day. Major flow is concentrated along zones of secondary permeability. The potentiometric surface interpretation and the dye study results suggest groundwater flows radially from the study area.</p> <p>The groundwater at the facility has had impacts and is in corrective action. The selected remedy at this time is gas extraction. Discussions are ongoing with the facility about groundwater corrective action at the site. The March 10, 2014 letter (Document 65639) includes a summary of the recent items discussed. The letter states that based on out-of-waste gas extraction well locations, monitoring wells MW-7N, MW-8N, MW-1N, NE-1, NE-4, and NE-5 could be much more affected by adjacent gas extraction than the surrounding aquifer away from the out-of-waste gas extraction wells. This remediation at or near the monitoring well can render these wells unrepresentative of the surrounding aquifer. As included in the letter, the</p>

Permit Application Summary	
	<p>facility is required to submit to the Department: a) proposed plan of action detailing how it intends to modify the gas system and/or monitoring system so that the system does not focus on monitoring wells, b) the technical basis for the out of waste gas extraction system design, and c) a modified "Corrective Action Monitoring Plan" (currently Document 24866). These submittal were due June 12, 2014. The response (Document 66045) was submitted by Chimney Rock Consulting on June 12, 2014 and is currently under review by ADEQ.</p>
Surface Drainage Sequence:	<p>Drainage across the site is generally to the south and water is conveyed to sedimentation basins located on the south side of the site. The outfalls located on the south side of the site discharge to a naturally occurring drainage swale that is conveyed to Little Wildcat Creek. A portion of the extreme northwest corner of the site drains to the north. (Pre-Application)</p> <p>Surface drainage from the landfill property occurs south and southeast in ephemeral tributaries approximately one-half mile to Little Wildcat Creek and Clear Creek. The area northwest of the Eco-Vista Landfill is drained by Wildcat Creek and its tributaries. Wildcat Creek flows to the northwest and enters Osage Creek which flows to the southwest and also joins the Illinois River after a short distance. The Illinois River eventually flows into the Arkansas River in Oklahoma.</p>
Waste Streams:	Class 1 and Class 4 wastes as defined in Regulation 22.
Capacity (consultant estimation):	<p>Total Capacity = 15,990,00 cubic yards (This includes the volume of solid waste and any daily or intermediate soil cover)</p> <p>[Old Landfill – Site 3 & 4/North & South Phases (5,990,000 CY); 10% Minor Modification in 2006 (596,000 CY); 46 Acre Lateral Expansion in 2006 (4,500,000 CY); Major Modification Lateral Expansion 2014 (4,904,000 CY)]</p>
Disposal Rate	<p>364,359 (tons/year) through the gate</p> <p>494,225 (cubic yards/year) Landfill Utilization Rate (approximately may vary)</p>
Projected Active Life after this modification	14.7 years (From year-end 2011) (approximately, will vary with waste received)
Bottom Liner System:	<ul style="list-style-type: none"> • A 24-inch thick compacted soil layer with hydraulic conductivity of less than 1×10^{-7} cm/s • A 60-mil thick textured high density polyethylene (HDPE) geomembrane • A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet • A geosynthetic clay liner

Permit Application Summary	
	<ul style="list-style-type: none">• A 60-mil thick textured high density polyethylene (HDPE) geomembrane• A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet
Final Cover:	<ul style="list-style-type: none">• A 6-inch Gas Venting Layer consisting of soil with a minimum hydraulic conductivity of 1×10^{-3} cm/s or greater placed directly over the last lift of waste. If an active gas collection system is required and approved for this facility, this layer will be replaced by a minimum 12-inch thick intermediate cover layer.• A geosynthetic clay liner• A 40-mil thick textured linear low density polyethylene (LLDPE) geomembrane• A geocomposite drainage layer, consisting of high-density polyethylene geonet with geotextile filter sheet bonded to both sides of the geonet• 12-inch Protective Cover Soil Layer• 6-inch Vegetative Soil Layer

Document Summary and Rationale for Conditions

The following information was considered during the preparation of a draft permit for the proposed facility:

- S Permit Pre-Application submitted July 20, 2010 (SWMD# 57953), submitted November 22, 2011 (SWMD# 61270), and revised on May 2, 2012 (SWMD# 62336) (Email dated August 7, 2012 SWMD# 62943)
- S Public notices submitted August 28, 2012 (SWMD# 63086), June 3, 2013 (SWMD# 64490),
- S The work plans for the lateral expansion area submitted July 20, 2010 (SWMD# 57959), dated July 26, 2010 (SWMD# 57982), dated August 2, 2010 (SWMD# 58060), November 24, 2010 (SWMD# 58619), March 9, 2012 (SWMD# 61944), May 3, 2012 (SWMD# 62356), July 13, 2013 (SWMD# 62796), September 5, 2012 (SWMD# 63119), October 3, 2012 (SWMD# 63249)
- S Preliminary results of borings drilled submitted November 1, 2010 (SWMD# 58510), November 23, 2011 (SWMD# 61275), March 9, 2012 (SWMD# 61943)
- S This major permit modification was completed through a series of documents furnished by the applicant on January 14, 2013 (SWMD# 63689); March 7, 2013 (SWMD# 64028); March 8, 2013 (SWMD# 64036), June 3, 2013 (SWMD# 64490); August 16, 2013 (SWMD# 64882); November 18, 2013 (SWMD# 65227); January 2, 2014 (SWMD# 65361); May 23, 2014 (SWMD# 65975); June 6, 2014 (SWMD# 66023)
- S Correspondence from the Permittee such as March 1, 2011 (SWMD# 59334); July 18, 2011 (SWMD# 60434); May 1, 2012 (SWMD# 62323), July 24, 2012 (SWMD# 62849); April 24, 2014 (SWMD# 65873) The Arkansas Solid Waste Management Code, as Amended (Regulation Number 22); and all other applicable rules and regulations of the Arkansas Department of Environmental Quality.
- S SWMD# 65990 is a Compilation of the Permit Modification Application for Eco-Vista. This Document was created by the SWMD electronically from previous WM submittals and does not exist as a separate document in the hard copy files. Response to Comments dated November 18, 2013 and Permit Modification Application revised on October 2013 – SWMD# 65227; After comments, only modified figures, tables, and texts were re-submitted or added, not the entire report - May 23, 2014 – SWMD# 65975; ALR Plan email – January 2, 2014 – SWMD# 65361; email from Johnny Mason dated June 17, 2014 Summary of Material Testing – SWMD# 66074, and added to the end of the document Response to Comments dated June 6, 2014 and Supplemental Hydrogeologic and Geotechnical Investigation Report Revised June 2014 - SWMD# 66023

Condition No.	Permit Conditions
1	This condition discusses the limited liability of ADEQ in issuance of the permit and the reliance on the accuracy and suitability of the information provided by the applicant's professional and responsible officials. [22.301(h) and (i) and Regulation 8]
2	This condition discusses the requirements to construct and operate of the disposal facility in accordance with the approved plans/specifications/operation narrative and in accordance with Sections 22.308, 22.411, and 22.422 of Regulation 22.
3	This condition discusses requirements to maintain the disposal facility in good operating condition under licensed, qualified, on-site operators is in accordance with Section 22.411 of Regulation 22 and Regulation 27.

Condition No.	Permit Conditions
4	The Department may revoke or modify the permit in the event the facility is no longer in compliance with the Arkansas Solid Waste Management Act, Regulation 22 or other applicable regulations [22.308].
5	Concerns issuance of modifications to the permit by the Department is in accordance with Sections 22.308 and 22.422 of Regulation 22.
6	Payment of permit fees in accordance with Regulation 9 and Regulation 11 are mandatory.
7	This contains specifications for transfer and disclosure requirement is in accordance with Act 454 of 1991.
8	Department employees may enter the permittees property to inspect the facility at any time without interference or delay is in accordance with Section 22.1501 of Regulation 22.
9	This provides a general summary of the permitted facility and disposal acreage. It further clarifies the permitted grades or boundaries may not be exceeded and clarifies the terms for placement of the permit in void status. The permit does not expire under current regulations. The permit may be placed in void status when the facility is filled to permit capacity and closed out in accordance with Regulation 22 and the approved closure plan and after completion of the post-closure. Corrective action may be necessary during the life of the permit and may be cause for extension of the post-closure care period under 22.1302(c).
10	This permit condition details the approved landfill plans for the facility. Any changes to the plans listed will require a modification to the facility permit. Detail for Site 3, Site 4, North 1 Acre, and the 2006 minor modification remain in this permit version. These areas were capped in 2010 but are not yet certified by ADEQ.
11	This permit condition details the approved waste disposal capacity for the expanded landfill. The volumes are based on the calculations prepared and presented by the applicant.
12	This permit condition establishes the permitted waste disposal boundary. Waste disposal outside this area is not approved.
13	This permit condition outlines the approved bottom configuration for the North 1 Acre Area as previously approved by the Department.
14	This permit condition establishes the approved bottom configuration for Cells 1-12 of the facility. Approval of this alternate configuration was completed in conjunction with the presented Liner Equivalency demonstration.
15	This permit condition establishes the approved final cover system for Cells 1-12. Approval of this alternate configuration was completed in conjunction with the presented Final Cover System Equivalency demonstration.
16	This permit condition identifies the approved Hazardous and Unauthorized Waste Exclusion Plan for the facility as required by Regulation 22.412.
17	This condition restricts the disposal of bulk liquid wastes at the facility. This was not requested under 22.420 and no submittal of liquid management plan.
18	This permit authorizes the use of synthetic tarps as an alternate daily cover. This condition was approved based on the landfill's previous success utilizing alternate cover material.

Condition No.	Permit Conditions
19	This permit condition details the approved Explosive Gas Monitoring Plan as required by Regulation 22.415. Because the facility is in corrective action monitoring at the time of issuance of this permit, and landfill gas generation is a key consideration during the corrective action, ADEQ requests under the authority of 22.421(b) that gas monitoring reports are submitted to the agency according to the language in the specific condition. In development of the draft permit decision, ADEQ and the applicant had discussions which indicated that the timing allowed for these report submittals was either insufficient or in some cases difficult to meet. The 14-day deadline for reporting has been extended in the final permit to 30 days.
20	This permit condition establishes the approved Operating Plan and Narrative as required by Regulation 22.
21	This permit allows only one working face. A second face may be requested and may be approved by ADEQ for the disposal of wastes during non-routine activities. Approval must be obtained in writing from the Department.
22	This permit condition requires the use of litter control fences or other litter control measures to be implemented for the control of blowing litter.
23	This condition is in place to address not only 22.411(h) but also 22.418. The condition clarifies that surface water controls are necessary and further it is a requirement of both Regulation 22 citations and that measures must be in place to control stormwater flow into or through an active portion defined by 22.102. Also, the condition is meant to clarify that leachate generated in the active portion defined by 22.102 is not allowed to be discharged and must be retained and directed to the facility collection system or otherwise collected and treated as leachate according to 22.419 and 22.429. [22.411(h), 22.418]
24	This condition includes the measures to control and prevent storm water run-on through or into the active disposal area and requirements for appropriate NPDES permit(s) and a Storm Water Pollution Prevention Plan (SWPPP) is in accordance with Sections 22.418, 22.419 and 22.427 of Regulation 22 and the Clean Water Act.
25	This permit condition establishes the Action Leakage Rate for the facility. The ALR was established based on the calculations prepared and presented in the application. This condition also establishes the approved contingency plan for the ALR.
26	This permit condition establishes the approved CQA Plan for the facility and references the specification in construction provided in application materials in accordance with 22.425, 428, and 429.
27	This permit condition restricts implementation of the blasting plan until the permittee can demonstrate that engineering measures and calculations have been incorporated in accordance with Section 22.407.
28	This condition establishes the approved Closure and Post-Closure Care Plan for the facility as required by Regulation 22.1301 and 22.1302. References are made to the closure phasing figures presented with the closure plan. These phasing progression figures affect the cost estimates of the largest area open at any one time.
29	This condition specifies the initial amount of financial assurance as required and requires annual updates by Regulation 22.1402 and 22.1403. The financial assurance must be updated before construction of cell 9, the beginning of the expansion permitted through this permit action. A limitation open areas of the expansion (including constructed but uncertified cap) is included. This is based on the details contained in the closure plan and cost estimates.

Condition No.	Permit Conditions
30	This permit condition requires the double lining of the leachate sumps and leachate collection trenches for additional protection from leakage in these most vulnerable locations.
31	This permit condition requires the monitoring of the quantity of fluid in the leachate sumps, leak detection sumps and leachate storage tanks. Conditions 28 and 29 present a detailed alternative monitoring requirement to satisfy 22.429(l).
32	This permit condition requires the analytical testing and reporting of the leachate collection and leak detection system. Conditions 28 and 29 present a detailed alternative monitoring requirement to satisfy 22.429(l).
33	Facility must comply with the air criteria requirements of Regulation 22.416 including the requirements of the State Implementation Plan of the Clean Air Act. Also, prohibiting the open burning of solid waste and establishing fire safety procedures.
34	This permit condition concerns the submittal of annual engineering inspection reports as specified by Regulation 22.423.
35	A groundwater monitoring system shall be established and maintained at the Eco-Vista Class 1 landfill that consists of a sufficient number of wells or sampling points, installed at appropriate locations and depths that will yield representative samples of groundwater quality (per Reg. 22.1202). The monitoring system shall be installed, operated and maintained in accordance with the approved design specifications throughout the active life of the facility and throughout the post-closure care period (per Reg. 22.1201(d) and Reg. 22.1302(b)).
36	All groundwater monitoring at the site as described in this Permit, the Groundwater Sampling and Analysis Plan (GWSAP) and Corrective Action Monitoring Program will follow the <u>standard</u> provisions within Regulation 22 except for the variances listed. This condition is to clarify that the standard provisions of Regulation 22 were intended to be followed except for the variances listed. Due to the length and complexity of the plans, there may be items that differ from Regulation 22 standard provisions – these differences are unintentional and the standard provisions of Regulation 22 should be followed.
37	<p>List of the 23 wells currently part of the groundwater monitoring system. Modification of the groundwater monitoring system will follow Regulation 22. Wells LGW-1, MW-4N, and MW-5N will be decommissioned as the landfill cells at the well locations are built. However, monitoring wells LGW-4, LGW-5, LGW-7, and MW-7N should be monitored during the active life of the facility and throughout the post-closure care period. Significant effort will be required to repair these four wells if they are damaged. These four wells had “positive” or “likely” dye traces during the 2005 dye study and were found to be screened within preferential groundwater flow zones. This may require significant excavation around the well to replace/repair the well casing, use of drilling rigs to help clear the inside of the well, or any other means needed to repair the wells. The facility must obtain permission from the SWMD to install, decommission, replace repair, or otherwise alter monitoring wells per Regulation 22.1103(f) and 22.1202 (c).</p> <p>Wells defined to be in the groundwater monitoring system are point of compliance wells. The wells are considered compliance “points” and no point of compliance “line” has been defined or is meant to be implied by the Director. The relevant point of compliance is considered to be “no more than 150 meters away from the waste management unit boundary” per Reg. 22.424. That is: groundwater at the site beyond the waste management unit boundary is still considered protected per Regulation 22 and may be monitored and remediated in the future.</p>

Condition No.	Permit Conditions
38	<p>Per Regulation 22.1204(b)(1) and Regulation 22.1205(c), the Director may specify an alternate frequency for sampling and analysis.</p> <p>Monthly Indicator Parameter sampling - The increased frequency required is based on the high groundwater flow rates (5 to several hundred feet per day) documented at the site during dye testing.</p> <p>Quarterly Sampling – this requirement is pursuant to Regulation 22.1204(b) for landfills within the Boone-St. Joe out crop area except decreased well sampling during the 2nd and 4th quarters are allowed due to the increased Monthly Indicator Parameter sampling in Condition 38a.</p> <p>Full Appendix 2 sampling during Assessment Monitoring and Corrective Action per Regulation 22.1205 and Regulation 22.1206. This condition requires full Appendix 2 sampling for wells which had an exceedance of the GWPS during the previous calendar year and all wells every 3 years. This decrease is an alternative in the prescriptive Regulation 22 Appendix 2 sampling which is specified to be performed annually during Assessment Monitoring or Corrective Action per Regulation 22.1205(b).</p> <p>Corrective Action Sampling per an SWMD approved Corrective Action Monitoring Program while the facility is in Corrective Action Status per Regulation 22.1208.</p>
39	<p>This condition requires creation of a background groundwater quality data set for use in statistical analysis. The background data set will be from wells confirmed to be unaffected by leakage (including landfill gas) from the unit. This requirement is from Regulation 22.1202(a)(1) and Regulation 22.1203(e). The conditions requires the facility to determine if a Statistically Significant Increase (SSI) has occurred based on results of the most recent sampling event during detection monitoring per Regulation 22.1204(c). To assist in characterizing the groundwater at the site and per Regulation 22.1203(k), SSIs will be determined at each well even if the facility is in assessment or corrective action status. Statement that all groundwater statistical methodologies will comply with Regulation 22. In addition, the methodologies will be consistent with the EPA “Unified Guidance” or the most current, relevant EPA statistical guidance publication per Regulation 22.1203(g) (6 & 7). Reg. 22.1203(k) requires the facility provide appropriate documentation of SSI’s in the GWMR and provide a discussion in the GWMR on the findings and conclusions concerning groundwater quality at the facility. The statistical methods and techniques used in the statistical evaluation must be clearly explained and referenced as part of the GWMR documentation and discussion in Reg. 1203(k). This permit condition requires a revised GWSAP be submitted to the Department for review within 60 days of the effective date of this final permit. The proposed GWSAP [Ground Water Sampling and Analysis Plan] in the permit application submittals is not approved in this permit.</p>
40	<p>This condition requires a Monthly Indicator Parameters Report that presents the monthly groundwater quality indicator data collected and daily data from the leak detection system and the leachate collection system. The increased sampling is in Condition 38a per Regulation 22.1204(b)(1) and Regulation 22.1205(c). The condition requires discussion of monthly indicator data, and the corrective action sampling within the regular Groundwater Monitoring Reports (GWMR). Also required are analytical results from the leak detection system and leachate collection system to be included in the GWMR. Other contents of the GWMR are discussed in Regulation 22.1203(k).</p>

Condition No.	Permit Conditions
41	This condition requires the ground water monitoring wells to be installed according to appropriate ASTM standards or EPA-530-R-93-017 and the monitoring system to be certified as adequate and properly constructed given the geologic conditions of the site by a qualified ground water scientist or approved by the Director. [Regulation 22.1103(f) and Regulation 22.1202]
42	Following monitor well installation, this condition requires the permittee to re-establish hydraulic conductivity to insure retrieved water samples are representative of formation ground water quality at this site. It requires the permittee to insure the ground water monitoring wells are capable of providing samples that are within the maximum allowable ranges for water clarity or turbidity. If turbidity-free samples from a well cannot be obtained, the permittee may need to redevelop the monitoring well, replace the well or provide justification the turbidity ranges shown are representative of ambient water quality in the formation (Regulation 22.1103(a)). Included is a schedule for reporting replaced or decommissioned wells.
43	This condition requires the permittee to have qualified personnel trained in the proper sampling and measuring techniques take water samples. Water level measurements must be taken prior to purging and sampling the monitoring wells, and uses the resulting data to determine the rate and direction of ground water flow in and around the facility. The sample analyses shall be performed by a lab certified by ADEQ (Regulation 22.1203). Analytical results shall be directly submitted from the contract, or independent third party laboratory to the Department. [Regulation 22.1203(j)(4)]
44	<p>a, b: This condition requires the permittee to analyze ground water samples in accordance with EPA Report SW-846 or an equivalent methodology. Parameter concentrations above the MDL must be reported. [Regulation 22.1203(b) & (h)(5); 1204(d)]</p> <p>cThis condition states other parameters of concern may be added by the Department based upon individual waste and leachate characteristics per Regulation 22.1204(a)(3). The sampling procedures and frequency must be protective of human health and the environment per Regulation 22.1203(c). The Department may modify the analytical parameters or sampling frequency based on waste or leachate characteristics, or as needed to determine or update representative background water quality or to investigate contaminants of potential concern as necessary to protect human health or the environment.</p> <p>d,e: Test methods and detection limits used in the analysis of ground water monitoring parameters must comply with Regulation 22.1204(d) and 22.1203(b).</p>
45	The permittee must select a statistical method approved by the Department for evaluating GWM data in conformance with the requirements of Regulation 22.1203(g), (h), (i), and (j).
46	The condition requires the facility to submit ground water monitoring reports that comply with Regulation 22.1203(k) and requires the permittee to submit analytical reports to ADEQ on specific dates.
47	This condition is a summary of Regulation 22.1204(c)

Condition No.	Permit Conditions
48	The condition requires a facility in Assessment Monitoring to determine if assessment monitoring constituents have been detected at a statistically significant level exceeding the established Ground Water Protection Standards. If a statistically significant level exceeding the Ground Water Protection Standards has occurred the permittee must follow steps of Regulation 22.1205(g) and initiate an Assessment of Corrective Measures at this facility. The permittee must then provide a Selection of Remedy and proceed with the Implementation of a Corrective Action Program for this facility. This condition allows ADEQ to address potential water quality impacts on human health and the environment in a timely manner. [Regulation 22.1205(g), Regulation 22.1205(h) or (i); Regulation 22.1206; Regulation 22.1207 and 22.1208]
49	The condition provides schedule for workplan required to characterize the nature and extent of any release as stated in Regulation 22.1205(g)(1)(i).
50	The condition specifies that any statements in the operational narrative, application documents, specifications, monitoring plans and engineering plans that conflict with Regulation 22, permit conditions, or other applicable laws and regulations shall not be considered authorized by the Department.
51	The condition provides notice for the purpose of appeal of the final permit in accordance with Section 22.306 of Regulation 22 and in accordance with Regulation 8. Provisions regarding severability are in accordance with Section 22.1601 of Regulation 22.

Response to Comments

On June 30, 2014, the Arkansas Department of Environmental Quality issued a draft permit associated with the construction and operation of the Eco-Vista, LLC Class 1 Landfill. During the thirty (30) day comment period the ADEQ-SWMD received comments from the facility (Document Number 66339). The following are the SWMD response to the facility comments.

Comment 1 received from WM:

Condition 17 - Disposal of bulk liquid waste in the landfill is prohibited. "Liquid waste" is waste which contains "free liquids" as defined by Methods 9095 (Paint Filter Test) as described in EPA Publication No. SW - 846.

Comment: This permit condition paraphrases Regulation 22.420. EVLF requests that each permit condition cite the applicable regulation rather than summarize or paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). EVLF believes the following revision to this permit condition meets the ADEQ's intent and will avoid current or future potential inconsistencies: ***Disposal of bulk liquid waste in the landfill is prohibited. "Liquid waste" has the meaning prescribed in Regulation 22.420.***

Response to Comment 1:

Including portions of the regulation stated in part, or in its entirety, allows the convenience of referencing one document. It is important to review Regulation 22 to fully understand a permittee's obligations and rights. However, a full or partial restatement of a provision in Regulation 22 in the permit can allow the individual reviewing the permit to understand the requirement and the basis of the requirement without referencing Regulation 22 and it allows ADEQ to add emphasis to provisions of Regulation 22 that are of specific concern for many facilities. To address the concern raised by Waste Management, the Department will quote the pertinent language from the provision of Regulation 22 in the conditions of this permit. The direct references will eliminate paraphrasing of any portion of Regulation 22 and the ambiguity that could potentially arise from the use of paraphrasing.

In regards to the concerns about future regulation amendments, it can only be stated that this permit is being issued under the authority provided by Regulation 22 as promulgated on March 28, 2008 and effective April 26, 2008. Any changes to Regulation 22 made after the issuance of this permit can be addressed through modification as needed to address any potential issues that may arise.

Condition 17 will be revised as follows: Bulk or non-containerized liquid waste may not be disposed in the landfill. 40 CFR 258.28(c)(1) and 22.102 defines liquid waste as any waste material that is determined to contain "free liquids" as defined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication SW-846).

Comment 2 received from WM:

Condition 19 - The permittee shall implement the Explosive Gas Monitoring Plan presented in Appendix M of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Landfill Gas Monitoring Plan, the facility shall fully meet all requirements of Reg. 22.415 regarding the control of explosive gases. The facility shall monitor each of the 16 gas monitoring probes detailed in the approved Landfill Gas Monitoring Plan and within all structures at the facility on a quarterly basis. The results shall be submitted to the Department within 14 days of each monitoring event.

Comment: EVLF intends to follow all State Regulations, including Regulation 22.415. Furthermore, EVLF will follow the Explosive Gas Monitoring Plan submitted in the Appendix M of the site's major permit modification. EVLF requests that the language requiring the results to "be submitted to the Department within 14 days of each monitoring event" be deleted. There is no regulatory basis for the 14 days and no other Waste Management facility is required to submit this data within 14 days of the monitoring event. The data is recorded and placed in the site's Permanent Operating Record in compliance with Reg. 22.415. EVLF respectfully requests that Permit Condition 19 be revised as follows: ***The permittee shall implement the Explosive Gas Monitoring Plan presented in Appendix M of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Landfill Gas Monitoring Plan, the facility shall fully meet all requirements of Reg. 22.415 regarding the control of explosive gases, which includes record keeping requirements.***

Response to Comment 2:

Regulation 22.421(b) states that the owner or operator must notify the Director when gas monitoring results from monitoring and any remediation plans required by Regulation 22.415 have been placed or added to the operating record. All information contained in the operating record must be furnished upon request to the Director or be made available at all reasonable times for inspection by the Director.

Condition 19 is revised as follows: The permittee shall implement the Explosive Gas Monitoring Plan presented in Appendix M of the Permit Modification Application having Solid Waste Management Division Document Identifier 65990. In addition to the implementation of the approved Landfill Gas Monitoring Plan, the facility shall fully meet all requirements of Reg. 22.415 regarding the control of explosive gases. The facility shall monitor each of the 16 gas monitoring probes detailed in the approved Landfill Gas Monitoring Plan and within all structures at the facility on a quarterly basis. The results shall be submitted to the Department within 30 days of each monitoring event.

Additionally, the permit rationale will be updated to include updated justification as follows:

This permit condition details the approved Explosive Gas Monitoring Plan as required by Regulation 22.415.

Because the facility is in corrective action monitoring at the time of issuance of this permit, and landfill gas generation is a key consideration during the corrective action, ADEQ requests under the authority of 22.421(b) that gas monitoring reports are submitted to the agency according to the language in the specific condition. In development of the draft permit decision, ADEQ and the applicant had discussions which indicated that the timing allowed for these report submittals was either insufficient or in some cases difficult to meet. The 14-day deadline for reporting has been extended in the final permit to 30 days.

Comment 3 received from WM:

Condition 22 - Litter control fences shall be provided in the active fill area for the control of blowing litter. Other litter control measures shall be implemented, if necessary, to confine litter to the smallest practicable extent and prevent litter from leaving the site.

Comment: This permit condition paraphrases Regulation 22.411(g). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). Further, this Condition refers to the "active fill area," which is not a defined term. EVLF believes the following revised language meets the ADEQ's intent and will avoid current or future potential conflicts or inconsistencies: ***The disposal facility shall provide litter control fences to help control blowing litter, and the disposal facility shall comply with Regulation 22.411(g).***

Response to Comment 3:

Paraphrasing is discussed in Response 1. ADEQ has considered this comment and in this case agrees to the changes. **Condition 22 is revised as requested.**

Comment 4 received from WM:

Condition 23 - Measures to control and prevent storm water run-on from running through or into the active disposal area and measures to prevent liquids from flowing out of the active disposal area shall be constructed and maintained. Grading, dikes, diversion ditches, silt fencing, silt traps, and other best management practices (BMP) for storm water control shall be provided as necessary to control/prevent off-site sediment accumulation from landfill related operations.

Comment: This permit condition paraphrases or summarizes Regulation 22.411(h). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). EVLF believes the following revised language meets the ADEQ's intent and will avoid current or future potential conflicts or inconsistencies: ***The disposal facility shall implement surface water controls as necessary to comply with Regulation 22.411(h).***

Response to Comment 4:

Paraphrasing is discussed in Response 1. ADEQ has considered this comment and in this case agrees in part to the revisions requested. It must be pointed out that this condition is in place to address not only 22.411(h) but also 22.418. The condition is intended to clarify that surface water controls are necessary and further it is a requirement of both regulation 22 citations and that measures must be in place to control stormwater flow into or through an active portion defined by 22.102. Also, the condition is meant to clarify that leachate generated in the active portion defined by 22.102 is not allowed to be discharged and must be retained and directed to the facility collection system or otherwise collected and treated as leachate according to 22.419 and 22.429. Also see 22.418(b) and 22.427(b). This clarification is useful to operators, inspectors, facility compliance managers, and reviewing engineers of the permittee and ADEQ. The change is made as requested with an additional clarification derived from the previously drafted condition.

Condition 23 is revised as follows: The facility shall implement and maintain surface water controls as defined in Regulation 22.411(h). Measures to control and prevent surface water from running through or into the active portion as defined in Regulation 22.102 and measures to prevent liquids from flowing out of the active portion as defined in Regulation 22.102 shall be constructed and maintained as required by Regulation 22.418.

Additionally, the permit rationale will be updated to include updated justification as follows:

This condition is in place to address not only 22.411(h) but also 22.418. The condition clarifies that surface water controls are necessary and further it is a requirement of both Regulation 22 citations and that measures must be in place to control stormwater flow into or through an active portion defined by 22.102. Also, the condition is meant to clarify that leachate generated in the active portion defined by 22.102 is not allowed to be discharged and must be retained and directed to the facility collection system or otherwise collected and treated as leachate according to 22.419 and 22.429. [22.411(h), 22.418]

Comment 5 received from WM:

Condition 27 - The permittee shall not implement the Class 4 "Pinnacle Blasting Plan" as proposed in the Operating Plan. A revised blasting plan shall be submitted for approval of ADEQ which shall contain necessary calculations and demonstrations to verify stability of the subsurface based on the impact of specified blasts.

Comment: EVLF has revised the Pinnacle Blasting Plan. The revised Plan is attached. EVLF wishes to emphasize that the site will limit its blasting efforts to removal of pinnacles which protrude into the landfill cells. The blasting, if utilized, will be shallow and limited to the depth and thickness of the pinnacle.

Response to Comment 5:

ADEQ has received the revised Blasting Plan and is currently being reviewed. ADEQ has not finished its review of the revised Blasting Plan and it is not approved at this time. Deficiency items, if any, will be addressed in a separate letter to the facility. Condition 27 remains as written in the draft permit.

Comment 6 received from WM:

Condition 29 - The initial total amount of financial assurance is \$7,694,146.00. Of this amount, \$5,834,464.00 will be required for closure costs and \$1,859,682.00 will be required for the post-closure care costs. This amount shall be subject to annual adjustments and may be increased at the discretion of the Department based upon the estimated cost for a third party to close the largest area requiring final cover during the active life of the facility and the cost for a third party to perform post closure care.

- a. The instruments used must be in one of the forms set forth in Regulation 22 or as otherwise approved by the Department.**
- b. A portion or all of the financial assurance may be held by the Department beyond the time of cessation of disposal operations at the site to ensure satisfactory closure and post closure care in accordance with Regulation 22.**
- c. No more than 36 acres of active or interim covered disposal area shall be open in the landfill expansion area. This requirement shall be addressed each year in the facility Annual Engineering and Inspection Report.**
- d. Cell construction shall be performed in the sequence outlined in the approved facility design plans (see Condition 10) and in closure construction shall comply with the facility closure plan including closure sequencing as presented in the closure plan reference drawings, Figures 1-3.**

Comment: This permit condition paraphrases or summarizes Chapters 13 and 14 of Regulation 22; specifically, Reg. 22.1402 and Reg. 22.1301(c). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). Additionally, Condition 29 c. and 29 d., which

relate to Closure Plans, do not take into account such impacts as variability in waste receipts and adjustments to the Active Portion of the landfill due to weather or climatic conditions. From time to time, the Closure Plan may need to be modified to reflect such conditions. Therefore, limiting the site to 'no more than 36 acres of active...' would require a modification to this Permit and Permit Condition should a revised Closure Plan be submitted by EVLF and approved by ADEQ. EVLF believes the following revision to this permit condition meets the ADEQ's intent and will avoid current or future potential conflicts or inconsistencies: ***The initial total amount of financial assurance required from the disposal facility is \$7,694,146.00. Of this amount, \$5,834,464.00 will be required for closure costs and \$1,859,682.00 will be required for the disposal facility post-closure care costs. The disposal facility shall comply with the applicable sections of Regulation 22, Chapters 13 and 14, which contain closure and post-closure care criteria and financial assurance criteria.***

Response to Comment 6:

Regulation 22.1301(c) requires owners or operators to prepare a written closure plan that describes the steps necessary to close all landfill units at any point during its active life in accordance with the cover design requirement. The closure plan must include an estimate of the largest area of the unit ever requiring final cover at any time during the active life. Regulation 22.1402 requires the owner or operator to have and maintain a detailed written estimate, in current dollars, of the cost of hiring a third party to close the largest area of all *permitted* facilities ever requiring a final cover as required under Reg.22.1301(c) at any time during the active life in accordance with the closure plan.

The closure plan submitted in the Permit Modification Application having Solid Waste Management Division Document Identifier 65990 stated the largest area ever open in the new lateral expansion area is 36 acres and further details depicting the phases of closure during the life of the landfill are depicted in Figures 1-3. The requirements of Condition 29 are in response to the closure plan required for review and approved in accordance with Regulation 22.1301(d) and *permitted* according to 22.1402.

ADEQ agrees that a permit modification would be required if EVLF revised the Closure Plan in a way that does not meet requirements of the current permit. It should also be noted that EVLF must increase the closure cost estimate and amount of financial assurance required if changes to the closure plan or permitted facility conditions increase the maximum cost of closure at any time during the remaining active life.

Condition 29 will remain as written in the draft permit based on the application materials provided.

Comment 7 received from WM:

Condition 33 - The permittee shall comply with the air criteria requirements of Regulation 22.416. Those requirements include meeting the State Implementation Plan (SIP) pursuant to Section 110 of the Clean Air Act; prohibiting open burning of solid waste, unless authorized by the Department; and establishing fire safety procedures.

Comment: This permit condition paraphrases Regulation 22.416(a), (b), and (c). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase

the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). Furthermore, EVLF has a current Air Permit for the facility. The permit number is 1884-AOP-R4. EVLF is currently working with ADEQ Air Division on an Air Permit renewal. This air permit renewal reflects the added waste disposal volume within this 34.8 acre expansion. EVLF believes the following revision to this permit condition meets the ADEQ's intent and will avoid current or future potential conflicts or inconsistencies: ***The permittee shall comply with the air criteria requirements of Regulation 22.416, and any Air Permit issued to the disposal facility.***

Response to Comment 7:

Paraphrasing is discussed in Response 1. ADEQ has considered this comment and in this case agrees to the changes. **Condition 33 is revised as requested.**

Comment 8 received from WM:

Condition 34 - The permittee shall furnish the Department annual engineering inspection reports in accordance with Regulation 22.423. The annual engineering inspection report for Class 1 facilities is due on March 31 of each year and shall cover the preceding period beginning January 1 and ending December 31.

Comment: This permit condition paraphrases a portion of Regulation 22.423 related to the due date of the inspection report and the period of reporting. If this language in Regulation 22.423 is ever modified, this Condition would then contain outdated, incorrect reporting information. EVLF believes the following revised language meets the ADEQ's intent and will avoid current or future potential conflicts or inconsistencies: ***The permittee shall furnish the Department annual engineering inspection reports in accordance with Regulation 22.423.***

Response to Comment 8:

Paraphrasing is discussed in Response 1. ADEQ has considered this comment and in this case agrees to the changes. **Condition 34 is revised as requested.**

Comment 9 received from WM:

Condition 41 - Regulation 22.1103(f) requires any new monitoring well(s) added to the ground water monitoring system shall be certified by a supervising professional and must comply with Regulation 22.1202(c). Regulation 22.1202(e) - The groundwater monitoring system must be certified by a qualified ground water scientist or approved by the Director. Within fourteen (14) days of submitting this certification to ADEQ, the permittee must notify the Director this monitoring system certification has been placed in the facilities operating record.

Monitoring well certification shall confirm all monitoring system components have been constructed and installed in an acceptable manner following appropriate ASTM D 5092 or EPA-530-R-93-017 well construction protocols.

Comment: This permit condition paraphrases or summarizes Regulation 22.1103(f), 1202(c), and 1202(e). EVLF requests that each permit condition cite the applicable regulation rather than summarize or paraphrase the regulation in order to avoid inconsistencies between the language in the permit condition and current or amended applicable regulation(s). Additionally, please note that EVLF will file a copy of the Groundwater Monitoring System Certification Report in the Permanent Operating Record (POR). The copy will serve as notification to ADEQ that the document was placed in the POR. EVLF believes the following revised language meets the ADEQ's intent and will avoid current or future potential conflicts or inconsistencies: ***The permittee shall comply with the monitoring well and groundwater monitoring system requirements set forth in Regulations 22,1103(f), 22.1202(c), and 22.1202(e).***

Response to Comment 9:

Condition 41 will be revised to add the phrase "per Reg. 22.1103" to the end of the permit condition. Quotation marks will be added to the direct quote from Regulation 22.1202(e). To clarify, a copy of the ground water monitoring system certification report should be sent to the ADEQ-Solid Waste Management Division.

Condition 41 will be revised as follows: Regulation 22.1103(f) requires any new monitoring well(s) added to the ground water monitoring system shall be certified by a supervising professional and must comply with Regulation 22.1202(c). Regulation 22.1202(e) – "The groundwater monitoring system must be certified by a qualified ground water scientist or approved by the Director. Within fourteen (14) days of submitting this certification [to ADEQ], the permittee must notify the Director this monitoring system certification has been placed in the operating record."

Monitoring well certification shall confirm all monitoring system components have been constructed and installed in an acceptable manner following appropriate ASTM D 5092 or EPA-530-R-93-017 well construction protocols per Regulation 22.1103.

Comment 10 received from WM:

Condition 42 - The permittee shall comply with Regulation 22.1103(a), which requires following construction, each well shall be developed to the degree necessary to restore formation hydraulic conductivity and insure retrieval of samples that are representative of formation ground water quality, at this facility.

Reports of replaced or decommissioned wells shall be submitted to the Department within 60 days of completion and shall be placed in the Operating Record.

Comment: This permit condition paraphrases Regulation 22.1103(a). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). Also, the information and procedures referenced in this Condition are contained in the applicant's Groundwater Sampling and Analysis Plan. EVLF believes the following language meets the ADEQ's intent and will avoid current or future potential inconsistencies: ***The permittee shall comply with Regulation 22.1103(a) and (f), which pertain to monitoring well construction and well decommissioning. Reports regarding replaced or decommissioned wells shall be submitted to the Department within 60 days of completion and shall be placed in the Permanent Operating Record.***

Response to Comment 10:

Condition 42 will be revised to add the direct quote from Regulation 22.1103(a) – “following construction, each well shall be developed to the degree necessary to restore formation hydraulic conductivity and insure low turbidity samples which are representative of formation ground water quality.”

Condition 42 will be revised as follows: The permittee shall comply with Regulation 22.1103(a), which requires “following construction, each well shall be developed to the degree necessary to restore formation hydraulic conductivity and insure low turbidity samples which are representative of formation ground water quality.”

Reports of replaced or decommissioned wells shall be submitted to the Department within 60 days of completion and shall be placed in the Operating Record.

Comment 11 received from WM:

Condition 43 - Each monitoring well shall be sampled by qualified personnel properly trained and familiar with appropriate procedures and techniques for the collection of ground water samples.

- a. Prior to purging the monitor wells, static water level measurements shall be taken, recorded and the data used to determine the rate and direction of ground water flow in the upper-most aquifer. Measurements are to be taken from the surveyed benchmark on the top rim of the well casing.**
- b. Sample analysis shall be performed by a laboratory that is properly certified by ADEQ to run the type of analysis required by Regulation 22. Analytical results shall be directly submitted from the contract or independent third party laboratory to the Department.**

Comment: This permit condition paraphrases Regulation 22.1203(d) and 22.1204(e)(4). EVLF requests that each permit condition cite the applicable regulation rather than summarize or paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). Also, the information and procedures

referenced in this Condition are contained in the applicant's Groundwater Sampling and Analysis Plan. EVLF believes the following language meets the ADEQ's intent and will avoid current or future potential inconsistencies: ***The permittee shall comply with Regulation 22.1203(d) and 22.1204(e)(4), which pertain to groundwater monitoring well measurements and procedures, and with the monitoring well information in the Groundwater Sampling and Analysis Plan included in this permit.***

Response to Comment 11:

Condition 43 will be revised to add the direct quote from Regulation 22.1203(d) – “Ground water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground water flow each time ground water is sampled” as prescribed in Regulation 22.1203(d).

Condition 43 will be revised to add “Testing laboratories shall be certified by the Department per the “State Environmental Laboratory Certification Program Act (Ark. Code Ann. § 8-2-201 et Seq.)”

Condition 43 will be revised to add the direct quote from Regulation 22.1203(j)(4) – As prescribed in Regulation 22.1203(j)(4), “Ground water analytical data submittal procedures, which shall include provisions for the direct submittal of all analytical results from the contract, or independent third party laboratory to the Department.”

Condition 43 will be revised as follows: Each monitoring well shall be sampled by qualified personnel properly trained and familiar with appropriate procedures and techniques for the collection of ground water samples.

- a. “Ground water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground water flow each time ground water is sampled” as prescribed in Regulation 22.1203(d).
- b. Testing laboratories shall be certified by the Department per the “State Environmental Laboratory Certification Program Act (Ark. Code Ann. § 8-2-201 et Seq.)” As prescribed in Regulation 22.1203(j)(4), “Ground water analytical data submittal procedures, which shall include provisions for the direct submittal of all analytical results from the contract, or independent third party laboratory to the Department.”

Comment 12 received from WM:

Condition 44 - Analysis of ground water samples shall be in accordance with the most current version of EPA Report SW-846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods or the most current EPA approved analytical method. This statement applies to the sub-provisions a - d listed below.

- a. **Volatile organic compounds analysis shall be in accordance with Method 8260 while metal analysis shall be in accordance with Method 6010 or a method from the 7000 series or an equivalent. Method detection limits for each parameter must be reported.**
- b. **All parameter concentrations that are above the Method Detection Limit (MDL) must be reported.**

- c. The Department may modify the analytical parameters or sampling frequency based on waste or leachate characteristics, or as needed to determine or update representative background water quality or to investigate contaminants of potential concern as necessary to protect human health or the environment.
- d. The Department may modify the sampling frequency or the methods required under this permit based on updated sampling or analytical methods found in SW-486 or the most current EPA approved methods.
- e. Test Methods and Detection Limits - Only Department approved test methods shall be used in the analysis of ground water monitoring parameters. Unless written approval is granted by the Department, the reporting detection limit (MDL) must be less than or equal to the values reported in EPA Report SW-846 Test Methods For Evaluating Solid Waste, Revision 6, February 2007, or current available edition.

Comment: This permit condition paraphrases Regulation 22.1204(d). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). Also, the information and procedures referenced in this Condition are contained in the applicant's Groundwater Sampling and Analysis Plan. EVLF believes the following language meets the ADEQ's intent and will avoid current or future potential inconsistencies: ***The permittee shall comply with Regulation 22.1204(d), which pertains to groundwater monitor test methods, and with the monitoring well procedures in the Groundwater Sampling and Analysis Plan included in this permit.***

Response to Comment 12:

Condition 44(a) will be revised to add quotation marks around the direct quote from the Regulation 22.1204(d) and will be revised to add the phrase "as prescribed in Regulation 22.1204(d)."

Condition 44(b) will be revised to add the phrase "as prescribed in Appendix 1 (4) and as referenced in Regulation 22.1203(h)(5) and Regulation 22.1204(d)". In addition, quotation marks were added.

Condition 44 (c) will be revised to add "Other parameters of concern may be added by the Department based upon individual waste and leachate characteristics" as stated in Regulation 22.1204(a)(3).

Condition 44(c) "The sampling procedures and frequency must be protective of human health and the environment" as stated in Regulation 22.1203(c).

Condition 44(d) will be revised to add the direct quote "Analytical methods utilized should conform [to] SW-846 or the most current EPA approved analytical method. Primary Drinking Water Standard MCL's shall be superceded by the publication of new standards from EPA" as prescribed in Regulation 22.1203(b).

Condition 44(e) will be revised to add quotation marks around the direct quote from Regulation 22.1204(d) and will be revised to add the phrase "as prescribed in Regulation 22.1204(d)."

Condition 44 will be revised as follows: Analysis of ground water samples shall be in accordance with the most current version of EPA Report SW-846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods or the most current EPA approved analytical methods. This statement applies to the sub-provisions a – e listed below.

- a. "Volatile organic compound analysis shall be in accordance with methods 8260 while metal analysis shall be in accordance with Method 6010 or a method from the 7000 series" or an equivalent as prescribed in Regulation 22.1204(d). Method Detection limits for each parameter must be reported.
- b. "All values above the Method Detection Limit must be reported" as prescribed in Appendix 1 (4) and as referenced in Regulation 22.1203(h)(5) and Regulation 22.1204(d).
- c. "Other parameters of concern may be added by the Department based upon individual waste and leachate characteristics" as stated in Regulation 22.1204(a)(3). "The sampling procedures and frequency must be protective of human health and the environment" as stated in Regulation 22.1203(c). The Department may modify the analytical parameters or sampling frequency based on waste or leachate characteristics, or as needed to determine or update representative background water quality or to investigate contaminants of potential concern as necessary to protect human health or the environment.
- d. "Analytical methods utilized should conform [to] SW-846 or the most current EPA approved analytical methods. Primary Drinking Waste Standard MCLs shall be superceded by the publication of new standards from EPA" as prescribed in Regulation 22.1203(b).
- e. "Test Methods and Detection Limits – Only Department approved test methods shall be used in the analysis of ground water monitoring parameters. Unless written approval is granted by the Department, the reporting detection limit (MDL) must be less than or equal to the values reported in EPA Report SW-846 Test Methods For Evaluating Solid

Waste," Revision 6, February 2007, or current available edition as prescribed in Regulation 22.1204(d).

Additionally, the permit rationale will be updated to include updated justification as follows:

a,b: This condition requires the permittee to analyze ground water samples in accordance with EPA Report SW-846 or an equivalent methodology. Parameter concentrations above the MDL must be reported. [Regulation 22.1203(b) & (h)(5); 1204(d)]

c: This condition states other parameters of concern may be added by the Department based upon individual waste and leachate characteristics per Regulation 22.1204(a)(3). The sampling procedures and frequency must be protective of human health and the environment per Regulation 22.1203(c). The Department may modify the analytical parameters or sampling frequency based on waste or leachate characteristics, or as needed to determine or update representative background water quality or to investigate contaminants of potential concern as necessary to protect human health or the environment.

d,e: This condition states test methods and detection limits used in the analysis of ground water monitoring parameters must comply with Regulation 22.1204(d) and 22.1203(b).

Comment 13 received from WM:

Condition 45 - The permittee must select a statistical method approved by the Department for evaluating water quality monitoring results for each constituent to determine whether a statistically significant increase (or decrease in the case of pH) occurs for each ground water monitoring constituent in conformance with the requirements of Regulation 22. 1203(g)(h) and (i).

Comment: This permit condition paraphrases Regulation 22.1203(g), (h), and (i). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies between the language in the permit condition and current or amended applicable regulation(s). Also, the information and procedures referenced in this Condition are contained in the applicant's Groundwater Sampling and Analysis Plan. EVLF believes the following language meets the ADEQ's intent and will avoid current or future potential conflicts or inconsistencies: ***The permittee shall comply with Regulation 22.1203(g), (h) and (i), which pertain to statistical methods used to evaluate groundwater monitoring data, and with the monitoring well procedures in the Groundwater Sampling and Analysis Plan included in this permit.***

Response to Comment 13:

Condition 45 will be revised to add the direct quote from Regulation 22.1203(j)(5). The permittee “shall develop and implement a Department approved site specific written sampling analysis plan. The sampling and analysis plan and all reports to ADEQ required under the sampling and analysis plan shall be certified by a qualified ground water scientist. The sampling and analysis plan must include the following element – a method for statistically evaluating ground water analytical data for significant changes must be selected. The method must be tailored to fit the hydrogeology of the site. For data quality assurance purposes, the statistical evaluation should be performed by a third party independent from the contract laboratory analyzing the ground water “ as prescribed in Regulation 22.1203(j)(5).

Condition 45 will be revised to add direct quote from Regulation 22.1203(i): The permittee “must determine whether or not there is a statistically significant increase or decrease over background values for pH. The owner or operator must determine whether or not there is a statistically significant increase for each parameter or constituent required in the particular ground water monitoring program that applies to the landfill, as determined under Reg. 22.1204(a) or Reg. 22.1205(a)” as prescribed in Regulation 22.1203(i).

Condition 45 will be revised to add “The statistical methods used to evaluate groundwater monitoring data must be in conformance with requirements of Regulation 22.1203(g), (h), and (i).”

Condition 45 will be revised as follows: The permittee “shall develop and implement a Department approved site specific written sampling and analysis plan. The sampling and analysis plan and all reports to ADEQ required under the sampling and analysis plan shall be certified by a qualified ground water scientist. The sampling and analysis plan must include the following element - a method for statistically evaluating ground water analytical data for significant changes must be selected. The method must be tailored to fit the hydrogeology of the site. For data quality assurance purposes, the statistical evaluation should be performed by a third party independent from the contract laboratory analyzing the ground water” as prescribed in Regulation 22.1203(j)(5).

The permittee “must determine whether or not there is a statistically significant increase or decrease over background values for pH. The owner or operator must determine whether or not there is a statistically significant increase for each parameter or constituent required in the particular ground water monitoring program that applies to the landfill, as determined under Reg. 22.1204(a) or Reg. 22.1205(a)” as prescribed in Regulation 22.1203(i).

The statistical methods used to evaluate groundwater monitoring data must be in conformance with requirements of Regulation 22.1203(g), (h), and (i).

Comment 14 received from WM:

Condition 47 - While in detection monitoring, should a statistically significant increase over established background concentration be detected for one or more of the monitored constituents, the permittee must undertake the following actions per Regulation 22.1204(c):

- a. Must, within 14 days of this finding, place a notice in the facility Operating Record indicating which constituents have shown statistically significant increase (SSI) from background levels, and notify the Director that this notice was placed in the operating records; and,**
- b. Establish an Assessment Monitoring Program meeting the requirements of Regulation 22.1205 within 90 days except as provided for in Regulation 22.1204(c)(3); or**
- c. The permittee may establish an alternate source other than the landfill has caused the contamination or the SSI was the results of a sampling error, laboratory error, statistical error or a natural variation in ground water quality at the location. A report documenting this demonstration must be certified by a qualified ground water scientist or be approved by ADEQ and be placed in the facilities operating record.**
- d. If, after 90 days, the permittee has not provided the Director a successful alternate source demonstration for this facility, as provided for in Regulation 22.1204(c)(3), the permittee must initiate an Assessment Monitoring Program.**

Comment: This permit condition paraphrases Regulation 22.1204(c)(1),(2), and (3). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies or conflicts between the language in the permit condition and current or amended applicable regulation(s). Also, the information and procedures referenced in this Condition are contained in the applicant's Groundwater Sampling and Analysis Plan. EVLF requests the following language be used for this Condition: ***The permittee shall comply with Regulation 22.1204(c)(1),(2), and (3), which pertains to statistically significant increases in groundwater monitoring well constituents, and with the monitoring well information in the Groundwater Sampling and Analysis Plan included in this permit.***

Response to Comment 14:

Condition 47 (a) will be revised to add direct quotes from Regulation 22.1204(c)(1)(2) and (3).

Condition 47 will be revised as follows: While in detection monitoring, should a statistically significant increase over established background concentration be detected for one or more of the monitored constituents, the permittee must undertake the following actions per Regulation 22.1204(c):

- a. "Must within fourteen (14) days of this finding, place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels, and notify the Director that this notice was placed in the operating record; and,
- b. Must establish an assessment monitoring program meeting the requirements of Reg. 22.1205 within ninety (90) days except as provided for in paragraph (c)(3) of this section [Regulation 22.1204].
- c. The owner or operator may demonstrate that a source other than a landfill caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground water scientist or approved by the Director and be placed in the operating record. If a successful demonstration is made and documented, the owner or operator may continue detection monitoring as specified in this section. If, after ninety (90) days, a successful demonstration is not made, the owner or operator must initiate an assessment monitoring program as required in Reg. 22.1205."

Comment 15 received from WM:

Condition 48 - While a facility is in an Assessment Monitoring Program, if one or more of the assessment monitoring constituents are detected at a statistically significant level exceeding the established Ground Water Protection Standards (GWPS) defined under Regulation 22.1205(h) or (i), the permittee must follow the steps of Regulation 22.1205(g) including initiation of Assessment of Corrective Measures for the facility, in accordance with Regulation 22.1206. Based upon the results of an Assessment of Corrective Measures, the permittee must proceed with Selection of a Remedy in accordance with Regulation 22.1207 and then proceed with Implementation of a Corrective Action Program for the facility in accordance with Regulation 22.1208.

Comment: This permit condition paraphrases Regulation 22.1205(g), (h), and (i). EVLF requests that each permit condition cite the applicable regulation rather than paraphrase the regulation in order to avoid inconsistencies between the language in the permit condition and current or amended applicable regulation(s). Also, the information and procedures referenced in this Condition are contained in the applicant's Groundwater Sampling and Analysis Plan. EVLF requests the following language be used for this Condition: ***The permittee shall comply with Regulation 22.1205(g), (h), and (i), which pertains to groundwater monitoring well constituent levels, assessment, and protection standards, and with the monitoring well information in the Groundwater Sampling and Analysis Plan included in this permit.***

Response to Comment 15:

Condition 48 will be revised to add direct quotes from Regulation 22.1205(g)

Condition 48 will be revised to add the phrase "per 22.1206".

Condition 48 will be revised as follows: While a facility is in an Assessment Monitoring Program, if one or more of the assessment monitoring constituents are detected at statistically significant levels exceeding the established Groundwater Protection Standards, the permittee must undertake the following steps per Regulation 22.1205(g).

1. "Within fourteen (14) days of this finding, place a notice in the operating record identifying the assessment monitoring constituents that have exceeded the ground water protection standard and notify the Director and all appropriate local government officials that the notice has been placed in the operating record. The owner or operator also:
 - (i) Must characterize the nature and extent of the release by installing additional monitoring wells as necessary;
 - (ii) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with Regulation 22.1205(d)(2);
 - (iii) Must notify all persons who own the land or reside on the land that directly overlies any part of the contaminant migration if contaminants have migrated off-site if indicated by sampling of wells in accordance with Reg. 22.1205(g)(1); and
 - (iv) Must initiate an assessment corrective measures as required by Regulation 22.1206 within ninety (90) days; or
2. May demonstrate that a source other than a landfill or solid waste disposal facility caused the contamination, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground water scientist or approved by the Director and placed in the operating record. If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to Regulation 22.1205, and may return to detection monitoring if the assessment monitoring constituents are at or below background as specified in Regulation 22.1205(e). Until a successful demonstration is made, the owner or operator must comply with Regulation 22.1205(g) including initiating an assessment of corrective measures."

Based upon the results of an Assessment of Corrective Measures per 22.1206, the permittee must proceed with Selection of a Remedy in accordance with Regulation 22.1207 and then proceed with Implementation of a Corrective Action program for the facility in accordance with Regulation 22.1208

ADEQ

A R K A N S A S
Department of Environmental Quality

November 25, 2015

Eco-Vista, LLC
Attn: Mr. David Conrad
100 Two Pine Drive
North Little Rock, AR 72117

**RE: Approval of Minor Permit Modification and Transmittal of Permit Addendum
Eco-Vista, LLC Class 1 Landfill
Permit Number: 0290-S1-R3 AFIN: 72-00144
Document Number: 68479 Cross Reference Number: 67725, 68124**

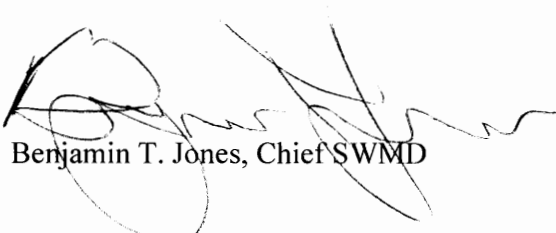
Dear Mr. Conrad:

ADEQ Solid Waste Management Division staff has received and reviewed a minor permit modification application regarding the Leachate Management Plan. The SWMD hereby approves the minor permit modification and transmits the attached permit addendum.

This authorization is given in reliance upon the statements and representations made to the Department, and the Department has no responsibility for ultimate proper functioning of the disposal facility. The Department also reserves the right to request additional information if deemed necessary. This approval shall not remove any liability nor hold Eco-Vista Class 1 Landfill harmless in the event of any adverse environmental or public health conditions resulting from this authorization. Eco-Vista Class 1 Landfill shall be solely and fully responsible for implementing any corrective action necessary to remediate any adverse condition at the site based on this authorization.

Please call me at 682-0600 should you have any questions regarding the above information.

Sincerely,



Benjamin T. Jones, Chief SWMD

cc: Justin Sparrow, District Field Inspector SWMD
Jeff Shepherd, SEDCO

Enclosures: Addendum to Permit

ADDENDUM TO PERMIT

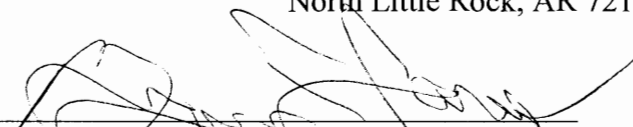
**ISSUED BY
STATE OF ARKANSAS**

DEPARTMENT OF ENVIRONMENTAL QUALITY

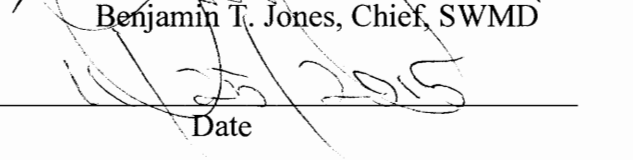
SOLID WASTE MANAGEMENT DIVISION

Landfill Name		AFIN:	72-00144																
Eco-Vista, LLC Class 1 Landfill		Permit No:	290-S1-R3																
Application reference	Description of Addendum to Permit																		
June 23, 2015 Document # 67725 and 68124	This permit modification is to update the Leachate Management Plan.																		
Additional Permit Conditions																			
10.a	<p>In addition to the previously approved plans for the facility, the following options are approved. The leachate management plan design/detail drawings follows:</p> <p>Drawings 1 through 8 of Document # 68124</p> <table border="0"> <tr> <td>Drawing 1 LCS/LDS Site Plan</td> <td align="right">Document #68124</td> </tr> <tr> <td>Drawing 2 Layout of North Phase LCS and LDS</td> <td align="right">Document #68124</td> </tr> <tr> <td>Drawing 3 Layout of Cells 9-12 LCS and LDS</td> <td align="right">Document #68124</td> </tr> <tr> <td>Drawing 4 North Phase Details I</td> <td align="right">Document #68124</td> </tr> <tr> <td>Drawing 5 North Phase Details II</td> <td align="right">Document #68124</td> </tr> <tr> <td>Drawing 6 Cells 9-12 Details I</td> <td align="right">Document #68124</td> </tr> <tr> <td>Drawing 7 Cells 9-12 Details II</td> <td align="right">Document #68124</td> </tr> <tr> <td>Drawing 8 Cells 9-12 Details III</td> <td align="right">Document #68124</td> </tr> </table>			Drawing 1 LCS/LDS Site Plan	Document #68124	Drawing 2 Layout of North Phase LCS and LDS	Document #68124	Drawing 3 Layout of Cells 9-12 LCS and LDS	Document #68124	Drawing 4 North Phase Details I	Document #68124	Drawing 5 North Phase Details II	Document #68124	Drawing 6 Cells 9-12 Details I	Document #68124	Drawing 7 Cells 9-12 Details II	Document #68124	Drawing 8 Cells 9-12 Details III	Document #68124
Drawing 1 LCS/LDS Site Plan	Document #68124																		
Drawing 2 Layout of North Phase LCS and LDS	Document #68124																		
Drawing 3 Layout of Cells 9-12 LCS and LDS	Document #68124																		
Drawing 4 North Phase Details I	Document #68124																		
Drawing 5 North Phase Details II	Document #68124																		
Drawing 6 Cells 9-12 Details I	Document #68124																		
Drawing 7 Cells 9-12 Details II	Document #68124																		
Drawing 8 Cells 9-12 Details III	Document #68124																		
20.a	The Leachate Management Plan has been updated in ADEQ Document Identifier 68124.																		
Revised Permit Condition																			
25.	The Action Leakage Rate for the facility including the North Phase, South Phase and Cells 1-12 is 150 gallons per acre per day. The Action Leakage Rate is based on the calculations presented in Appendix Q of the Solid Waste Management Division Document Identifier 65990. The approved contingency plan for the Action Leakage Rate associated with the North and South Phases has Solid Waste Management Division Document Identifier 18104. The approved contingency plan for the Action Leakage Rate associated with cells 1-12 has been included in the submittal having Solid Waste Management Division Document Identifier 68124.																		

APPROVED BY: Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317.



Benjamin T. Jones, Chief, SWMD



Date

CERTIFICATE OF SERVICE

I hereby certify that a copy of the aforementioned permit has been mailed by first-class mail to Mr. David Conrad, 100 Two Pine Drive, North Little Rock, AR 72117.

Certified by Barbara J. Mathews on or before this 25th day of November, 2015

Statement of Basis-Rationale for Permit Conditions	
22.306(c) requires permit decisions to include a rationale for the decisions made including technical basis for site specific conditions. Following is a summary of the rationale for the new/ revised conditions presented in this modification.	
10.a.	This permit condition details additional approved landfill plans for the facility required to be submitted and approved. [22.303(c)(12)] Changes to the plans from those previously approved require a modification to the facility permit. [22.308]
20.a	This permit condition establishes the approved Operating Plan and Narrative. [22.303(c)(13), 422]
25.	This permit condition establishes the Action Leakage Rate for the facility. The ALR was established based on the calculations prepared and presented in the application. This condition also establishes the approved contingency plan for the ALR. [22.425(e)]

The following information was considered during the preparation of the permit for the proposed facility:

68124 September 24, 2015 Response to Notice of Deficiency Minor Permit Modification Application – Updated Leachate Management Plan and drawings are attached by Shepherd Engineering

68020 August 27, 2015 ADEQ Notice of Deficiency – Updated Leachate Management Plan

67725 June 22, 2015 Minor Permit Modification Application - Leachate Management Plan by Shepherd Engineering

ADEQ

ARKANSAS
Department of Environmental Quality

August 10, 2016

Mr. David Conrad
Waste Management of Arkansas
100 Two Pine Drive
North Little Rock, AR 72117

**RE: Minor Permit Modification Approval - Liquid Waste Management Plan
Waste Management Eco-Vista Class 1 Landfill
Permit No. 0290-S1-R3 AFIN 72-00144
Document Number: 70090 Cross Reference Number: 69891 and 70077**


Dear Mr. Conrad:

The Arkansas Department of Environmental Quality – Office of Land Resources (ADEQ) Regulated Waste Programs staff has received and reviewed your Liquid Waste Management Plan (LWMP) submitted under a cover letter dated July 7, 2016 (Doc # 69891) related to the Waste Management Eco-Vista Class 1 Landfill (Permit 0290-S1-R3). After careful consideration and review the ADEQ hereby approves the submitted LWMP and transmits the attached permit modification.

This authorization is given in reliance upon the statements and representations made to the Department, and the Department has no responsibility for ultimate proper functioning of the disposal facility. The Department also reserves the right to request additional information if deemed necessary. This approval shall not remove any liability nor hold Waste Management Eco-Vista Class 1 Landfill harmless in the event of any adverse environmental or public health conditions resulting from this authorization. Waste Management Eco-Vista Class 1 Landfill shall be solely and fully responsible for implementing any corrective action necessary to remediate any adverse condition at the site based on this authorization.

Thank you for your cooperation on this matter. If you have any questions, or if we may be of service, please feel free to contact ADEQ-Office of Land Resources at (501) 682-0744.

Sincerely,



Tammie J. Hynum
Acting Senior Operations Manager, OLR

OLR- McWilliams, Love, Cusher and Matoska

Permit Addendum

ISSUED BY
STATE OF ARKANSAS
DEPARTMENT OF ENVIRONMENTAL QUALITY
REGULATED WASTE PROGRAMS

Tontitown Eco-Vista, LLC	AFIN:	
Class 1 Landfill	Permit No:	0290-S1-R3
Date	Addendum to Permit	
<p>July 7, 2016 Doc. # 69891</p> <p>August 4, 2016 Doc. #70077</p>	<p>Permit Condition #17 in the current permit shall be replaced with:</p> <p>17. Permittee shall follow the approved Liquid Waste Management Plan (LWMP) submitted under cover letter dated July 7, 2016 (Document #69891). The following conditions shall apply to the operations of the liquid bulking activities:</p> <ul style="list-style-type: none"> a) Except for foul weather conditions and equipment failures as outlined in the approved LWMP, storage of liquid waste overnight, whether in the designated surge tank or in the bulking pits, is prohibited. b) Treated liquid waste shall not exhibit free liquids as determined by USEPA Publication SW-846, Method 9095B, "Paint Filter Liquid Test" prior to disposal. Two (2) tests will be required for each batch of treated waste (i.e., each pit of treated waste) and the results recorded in the landfill operating record. Samples shall be obtained from the bulking pit at the mid-depth and bottom. c) Treated waste shall be capable of supporting landfill cover soil and equipment prior to disposal. Permittee shall perform and report demonstration test results of the treated waste under equipment loading for the different bulking materials/agents. Landfill equipment passing over the treated waste during the demonstration test shall leave distinct impressions of wheels or tracks with limited rutting or displacement of treated waste. In addition, no free liquids shall emerge from the treated waste during the demonstration test. If rutting or free liquids are observed during the demonstration test, the treatment shall be determined inadequate and further treatment shall be required. d) Records of the waste treatment shall be maintained in the facility's operating record. The liquid waste treatment records shall consist of data gathered from each batch of waste treated. Data to be recorded shall include the type and volume of liquid waste, the name of bulking material(s)/agent(s) used, and the volume and estimated weight of the amount of bulking material(s)/agent(s) used. From the gathered data an estimated ratio of bulking material to liquid waste shall be recorded. In addition, the facility shall keep the record of the volume of treated liquid waste disposed. e) To reduce potential stability problems during current operations and in future static landfill conditions, the facility must limit disposal of the treated liquid waste to no more than 15% of the total volume of waste disposed at the facility. This will be calculated on an annual basis. The facility must report the percent of the treated liquid waste as part of the annual engineering report. To exceed the 15% limit, the facility must submit a slope stability analyses and obtain prior approval from the Department. f) The Department reserves the right to prevent the facility from further receipt and processing of liquid waste should it be determined the materials are mishandled in any way. 	

Statement of Basis – Rationale for Permit Condition

22.306(c) requires permit decisions to include a rationale for the decisions made including technical basis for site specific conditions. Following is a summary of the rationale for the new and revised condition presented in this modification.

Permit Condition #17 a	Regulation 22.420(d)
Permit Condition #17 b	Regulation 22.420(g)(5)
Permit Condition #17 c	Regulation 22.420(e) and 22.420(g)(3)
Permit Condition #17 d	Regulation 22.420(g)(3) and 22.420(g)(5)
Permit Condition #17 e	Regulation 22.431(b)
Permit Condition #17 f	Regulation 22.420(f)

Handwritten notes in blue ink: "JEDUNA" and "11/11" are visible below the table.

APPROVED BY:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

CERTIFICATE OF SERVICE

I, Rita Sparks, hereby certify that a copy of the aforementioned permit has been mailed by first-class mail to Mr. David Conrad, 100 Two Pine Drive, North Little Rock, 72117 on or before this 16th day of August, 2016.

ADEQ

ARKANSAS
Department of Environmental Quality

WASTE PROGRAMS, OFFICE OF LAND RESOURCES ROUTING SLIP

DATE 8/09/2016

Subject: Minor mod-Liquid Waste Management Plan Eco-Vista Class 1 Landfill

From: Maria Matoska

<u>Route in turn to:</u>	<u>Action Needed</u>	<u>Date Received</u>	<u>Date Reviewed</u>	<u>Initials</u>
Cusher	<input checked="" type="checkbox"/> Concurrence <input checked="" type="checkbox"/> Review	<u>8/10</u>	<u>8/15</u>	<u>Ae</u>
Hynum (sign)	<input checked="" type="checkbox"/> Concurrence <input checked="" type="checkbox"/> Review	<u>8/15/16</u>	<u>8/15/16</u>	<u>HM</u>
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____

**Note: Marking the Concurrence box indicates the individual agrees with the applicable text as it relates to their individual discipline and Work Section (e.g., Engineer; Risk Assessor; Geology; Compliance; Policy/Management), as applicable. Marking the Review box indicates the individual has read the document.*

Return to [Maria Matoska] for distribution

COMMENTS:

This minor mod is in the same format as the one we did for Two Pine Class 1.

ADEQ

ARKANSAS
Department of Environmental Quality

August 18, 2016

Eco-Vista, LLC
Attn: Mr. David Conrad
100 Two Pine Drive
North Little Rock, AR 72117

**RE: Approval for Minor Permit Modification and Transmittal of Permit Addendum
Eco-Vista, LLC Class 1 Landfill
Permit Number: 0290-S1-R3 AFIN: 72-00144
Document Number: 70125 Cross Reference Numbers: 69891**

Dear Mr. Conrad:

The Arkansas Department of Environmental Quality-Office of Land Resources staff has received and reviewed a minor permit modification application associated with the liner and leachate collection system design alternatives. The modification also includes the utilization of a drainage composite and the addition of chimney drains in the protective soil cover. The minor modification is for the purpose of improving leachate management and providing design alternatives for the liner and leachate collection system. The ADEQ hereby approves the minor permit modification and transmits the attached permit addendum.

This authorization is given in reliance upon the statements and representations made to the Department, and the Department has no responsibility for ultimate proper functioning of the disposal facility. The Department also reserves the right to request additional information if deemed necessary. This approval shall not remove any liability nor hold the Two Pine Class 1 Landfill harmless in the event of any adverse environmental or public health conditions resulting from this authorization. Eco-Vista, LLC Class 1 Landfill shall be solely and fully responsible for implementing any corrective action necessary to remediate any adverse condition at the site based on this authorization.

Please call me at 682-0833 should you have any questions regarding the above information.

Sincerely,



Tammie J. Hynum, Acting Senior Operations Manager
Office of Land Resources

OLR- McWilliams, Love, Cusher and Matoska

ADDENDUM TO PERMIT

ISSUED BY

STATE OF ARKANSAS

DEPARTMENT OF ENVIRONMENTAL QUALITY

OFFICE OF LAND RESOURCES-REGULATED WASTE PROGRAMS

Landfill Name	AFIN:	72-00144						
Eco-Vista, LLC	Permit No:	0290-S1-R3						
Application reference (Date/doc ID)	Description of Addendum to Permit							
July 7, 2016 Doc.# 69891	Permit Modification Application Forms							
	<p>This minor permit modification provides for additional liner and leachate collection system alternatives. This modification also includes the installation of chimney drains in the protective soil cover to improve leachate collection performance.</p> <p>The protective soil layer for the chimney drains shall consist of materials as specified in the approved ADEQ document #69891.</p> <p>The following drawings are approved in addition to the previously approved drawings in ADEQ document # 66522 Condition 10.</p> <table><tr><td>Drawing 1 of 3 Drainage Lengths</td><td>Document #69891</td></tr><tr><td>Drawing 2 of 3 Leachate Collection System Design With Chimney Drains</td><td>Document #69891</td></tr><tr><td>Drawing 3 of 3 Leachate Collection Details</td><td>Document #69891</td></tr></table>		Drawing 1 of 3 Drainage Lengths	Document #69891	Drawing 2 of 3 Leachate Collection System Design With Chimney Drains	Document #69891	Drawing 3 of 3 Leachate Collection Details	Document #69891
Drawing 1 of 3 Drainage Lengths	Document #69891							
Drawing 2 of 3 Leachate Collection System Design With Chimney Drains	Document #69891							
Drawing 3 of 3 Leachate Collection Details	Document #69891							

APPROVED BY: Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR
72118-5317

8-18-16
Date

CERTIFICATE OF SERVICE

I hereby certify that a copy of the aforementioned permit has been mailed by first-class mail to Mr. David Conrad, 100 Two Pine Drive, North Little Rock, AR 72117.

Certified by Rita D. Spakes on or before this 23^d day of August, 2016.

ADEQ

ARKANSAS
Department of Environmental Quality

WASTE PROGRAMS, OFFICE OF LAND RESOURCES ROUTING SLIP

DATE 8/16/2016
Subject: Minor mod- Eco-Vista Class 1 Landfill
From: Maria Matoska

<u>Route in turn to:</u>	<u>Action Needed</u>	<u>Date Received</u>	<u>Date Reviewed</u>	<u>Initials</u>
Cusher	<input checked="" type="checkbox"/> Concurrence <input checked="" type="checkbox"/> Review	8/17	8/17	AC
Hynum (sign)	<input checked="" type="checkbox"/> Concurrence <input checked="" type="checkbox"/> Review	8/18/16	8/18/16	JH
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____
	<input type="checkbox"/> Concurrence <input type="checkbox"/> Review	_____	_____	_____

***Note: Marking the Concurrence box indicates the individual agrees with the applicable text as it relates to their individual discipline and Work Section (e.g., Engineer; Risk Assessor; Geology; Compliance; Policy/Management), as applicable. Marking the Review box indicates the individual has read the document.**

Return to [Maria Matoska] for distribution

COMMENTS:

This minor mod is in the same format as the one we did for Two Pine Class 1.