

# Permit Application

---

Lea County, New Mexico

C.K. Disposal E & P Landfill and  
Processing Facility

Permit No. TBD

Volume I

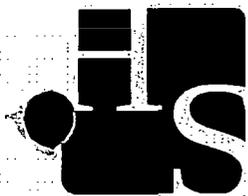
November 2015

PSC Project # 01058015



PARKHILLSMITH&COOPER

---



**HANCE SCARBOROUGH, LLP**  
ATTORNEYS AND COUNSELORS AT LAW

Michael L. Woodward  
Attorney

mwoodward@hslawmail.com

RECEIVED 000

January 30, 2017 2017 FEB -1 - A 11:42

*Via Overnight Delivery*

ATTN: Ms. Florene Davidson  
Commission Clerk  
New Mexico Oil Conservation Commission  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Re: Case No. 15617; State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Commission; Application of CK Disposal, LLC for a Permit to Operate a Commercial Surface Waste Management Facility, Lea County, New Mexico.

Dear Ms. Davidson:

In connection with the Applicant's Pre-hearing Statement, please find enclosed six (6) copies of the permit application in the referenced matter. These copies are part of Applicant's Pre-hearing Statement, and will be exhibits of the Applicant at the hearing in the referenced matter. Due to the voluminous nature of these exhibits, we are having them delivered directly from the engineering firm that generated the copies. As referenced below, copies are also being sent to respective counsels for the parties.

Thank you for your attention to this matter, and please feel free to contact me should you have any questions or comments.

Sincerely,

Michael L. Woodward

Enclosure – Six (6) copies of CK Disposal's Permit Application Volumes I & II.

Cc: David K. Brooks  
Assistant General Counsel  
Energy, Minerals and Natural Resources Department  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

*Enclosure – One Copy of CK Disposal's Permit Application Volumes I & II*

January 30, 2017

Page 2

---

Henry M. Bohnhoff

Cynthia A. Loehr

Rodey Law Firm

201 3rd Street NW, Suite 2200

Albuquerque, NM 87102

*Enclosure – One Copy of CK Disposal's Permit Application Volumes I & II*

# Permit Application

---

Lea County, New Mexico

C.K. Disposal E & P Landfill and  
Processing Facility

Permit No. TBD



11/06/2015

November 2015

PSC Project # 01058015



PARKHILLSMITH&COOPER

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505



Form C-137  
Revised August 1, 2011

Submit 1 Copy to Santa Fe Office

### APPLICATION FOR SURFACE WASTE MANAGEMENT FACILITY

*A meeting should be scheduled with the Division's Santa Fe office Environmental Bureau prior to pursuing an application for a surface waste management facility in order to determine if the proposed location is capable of satisfying the siting requirements of Subsections A and B of 19.15.36.13 NMAC for consideration of an application submittal.*

1. Application:  New  Modification  Renewal
2. Type:  Evaporation  Injection  Treating Plant  Landfill  Landfarm  Other
3. Facility Status:  Commercial  Centralized

4. Operator: C.K. Disposal LLC

Address: 5909 86<sup>th</sup> Street, Lubbock, Texas 79424

Contact Person: Bryce Karger Phone: 480-437-0044

5. Location: /4 /4 Section 15 Township 336 Range 38E

Is this an existing facility?  Yes  No If yes, provide permit number

7. Attach the names and addresses of the applicant and principal officers and owners of 25 percent or more of the applicant. Specify the office held by each officer and identify the individual(s) primary responsible for overseeing management of the facility.
8. Attach a plat and topographic map showing the surface waste management facility's location in relation to governmental surveys (quarter-quarter section, township and range); highways or roads giving access to the surface waste management facility site; watercourses; fresh water sources, including wells and springs; and inhabited buildings within one mile of the site's perimeter.
9. Attach the names and addresses of the surface owners of the real property on which the surface waste management facility is sited and surface owners of the real property within one mile of the site's perimeter.
10. Attach a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.
11. Attach engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments.
12. Attach a plan for management of approved oil field wastes that complies with the applicable requirements contained in 19.15.36.13, 19.15.36.14, 19.15.36.15 and 19.15.36.17 NMAC.
13. Attach an inspection and maintenance plan that complies with the requirements contained in Subsection L of 19.15.36.13 NMAC.
14. Attach a hydrogen sulfide prevention and contingency plan that complies with those provisions of 19.15.3.118 NMAC that apply to surface waste management facilities.

15. Attach a closure and post closure plan, including a responsible third party contractor's cost estimate, sufficient to close the surface waste management facility in a manner that will protect fresh water, public health, safety and the environment (the closure and post closure plan shall comply with the requirements contained in Subsection D of 19.15.36.18 NMAC).

16. Attach a contingency plan that complies with the requirements of Subsection N of 19.15.36.13 NMAC and with NMSA 1978, Sections 12-12-1 through 12-12-30, as amended (the Emergency Management Act).

17. Attach a plan to control run-on water onto the site and run-off water from the site that complies with the requirements of Subsection M of 19.15.36.13 NMAC.

18. In the case of an application to permit a new or expanded landfill, attach a leachate management plan that describes the anticipated amount of leachate that will be generated and the leachate's handling, storage, treatment and disposal, including final post closure options.

19. In the case of an application to permit a new or expanded landfill, attach a gas safety management plan that complies with the requirements of Subsection O of 19.15.36.13 NMAC

20. Attach a best management practice plan to ensure protection of fresh water, public health, safety and the environment.

21. Attach a demonstration of compliance with the siting requirements of Subsections A and B of 19.15.36.13 NMAC.

22. Attach geological/hydrological data including:

(a) a map showing names and location of streams, springs or other watercourses, and water wells within one mile of the site;

(b) laboratory analyses, performed by an independent commercial laboratory, for major cations and anions; benzene, toluene, ethyl benzene and xylenes (BTEX); RCRA metals; and total dissolved solids (TDS) of ground water samples of the shallowest fresh water aquifer beneath the proposed site;

(c) depth to, formation name, type and thickness of the shallowest fresh water aquifer;

(d) soil types beneath the proposed surface waste management facility, including a lithologic description of soil and rock members from ground surface down to the top of the shallowest fresh water aquifer;

(e) geologic cross-sections;

(f) potentiometric maps for the shallowest fresh water aquifer; and

(g) porosity, permeability, conductivity, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be placed.

23. In the case of an existing surface waste management facility applying for a minor modification, describe the proposed change and identify information that has changed from the last C-137 filing.

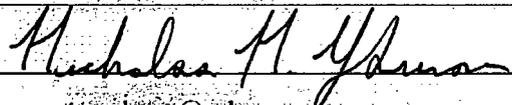
24. The division may require additional information to demonstrate that the surface waste management facility's operation will not adversely impact fresh water, public health, safety or the environment and that the surface waste management facility will comply with division rules and orders

## 25. CERTIFICATION

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name: Nicholas N. Ybarra

Title: Associate

Signature: 

Date: 11-6-2015

E-mail Address: nnybarra@yahoo.com

# Permit Application

---

Lea County, New Mexico

C.K. Disposal E & P Landfill and  
Processing Facility

Permit No. TBD

November 2015

PSC Project # 01058015



PARKHILLSMITH&COOPER

**NMAC 19.15.36.8 – SURFACE WASTE MANAGEMENT FACILITY PERMITS AND APPLICATION REQUIREMENTS**

- 1.0 NMAC 19.15.36.8 - INTRODUCTION
  - 1.1 NMAC 19.15.36.8.A – Permit Required
  - 1.2 NMAC 19.15.36.8.B – Permitting Requirements
  - 1.3 NMAC 19.15.36.8.C – Application Requirements for New Facilities
  - 1.4 NMAC 19.15.36.8.D – Application Requirements for Minor Modifications
  - 1.5 NMAC 19.15.36.8.E - Determination that Application is Administratively Complete

**TABLES**

Table 1 – C.K. FACILITY

Table 2 – ADJACENT LANDOWNERS (1-MILE FROM PERMIT BOUNDARY) AND NOTIFICATION LIST

**NMAC 19.15.36.9 - NOTICE REQUIREMENTS FOR NEW SURFACE WASTE MANAGEMENT FACILITIES, MAJOR MODIFICATIONS OR RENEWALS AND ISSUANCE OF A TENTATIVE DECISION**

- 1.0 NMAC 19.15.36.9 – Notice Requirements for New Surface Waste Management Facilities, Major Modifications or Renewals and Issuance of a Tentative Decision
  - 1.1 NMAC 19.15.36.9.A – Application for New Surface Waste Management Facility Permit, Permit Renewal or Major Modification
  - 1.2 NMAC 19.15.36.9.B – Division Application Notice
  - 1.3 NMAC 19.15.36.9.C – Application Comments
  - 1.4 NMAC 19.15.36.9.D – Tentative Decision After Comments
  - 1.5 NMAC 19.15.36.9.E – Notice of the Tentative Decision
  - 1.6 NMAC 19.15.36.9.F – Application Notice Requirements

**TABLES**

Table 1 – ADJACENT LANDOWNERS (1-MILE FROM PERMIT BOUNDARY) AND NOTIFICATION LIST

**NMAC 19.15.36.10 – COMMENTS AND HEARING ON APPLICATION**

- 1.0 NMAC 19.15.36.10 – COMMENTS AND HEARING ON APPLICATION
  - 1.1 NMAC 19.15.36.10.A – File Comments or Requesting a Hearing
  - 1.2 NMAC 19.15.36.10.B – If Scheduled, Hearing Shall be Conducted According to 19.15.14.1206 through 19.15.14.1215 NMAC

**NMAC 19.15.36.11 – FINANCIAL ASSURANCE REQUIREMENTS**

- 1.0 NMAC 19.15.36.11 – FINANCIAL ASSURANCE REQUIREMENTS
  - 1.1 NMAC 19.15.36.11.A – Financial Assurance Requirements for Centralized Facilities
  - 1.2 NMAC 19.15.36.11.B – Financial Assurance Requirements for New Commercial Facilities
  - 1.3 NMAC 19.15.36.11.C – Terms of Financial Assurance
  - 1.4 NMAC 19.15.36.11.D – Forfeiting Financial Assurance
  - 1.5 NMAC 19.15.36.11.E – Forms of Financial Assurance
  - 1.6 NMAC 19.15.36.11.F – Replacement of Financial Assurance
  - 1.7 NMAC 19.15.36.11.G – Review of Adequacy of Financial Assurance

**NMAC 19.15.36.12 - PERMIT APPROVAL, DENIAL, REVOCATION, SUSPENSION, MODIFICATION OR TRANSFER**

- 1.0 NMAC 19.15.36.12 – PERMIT APPROVAL, DENIAL, REVOCATION, SUSPENSION MODIFICATION OR TRANSFER
  - 1.1 NMAC 19.15.36.12.A – Granting of Permit
  - 1.2 NMAC 19.15.36.12.B – Denial of Permit
  - 1.3 NMAC 19.15.36.12.C – Additional Requirements
  - 1.4 NMAC 19.15.36.12.D – Revocation, Suspension or Modification of a Permit
  - 1.5 NMAC 19.15.36.12.E – Transfer of a Permit

**NMAC 19.15.36.13 - SITING AND OPERATIONAL REQUIREMENTS APPLICABLE TO ALL PERMITTED SURFACE WASTE MANAGEMENT FACILITIES**

- 1.0 NMAC 19.15.36.13 – SITING AND OPERATIONAL REQUIREMENTS APPLICABLE TO ALL PERMITTED SURFACE WASTE MANAGEMENT FACILITIES: EXCEPT AS OTHERWISE PROVIDED IN 19.15.36 NMAC - INTRODUCTION
  - 1.1 NMAC 19.15.36.13.A – Depth to Ground
  - 1.2 NMAC 19.15.36.13.B – No Surface Waste Management Facility Shall be Located:
  - 1.3 NMAC 19.15.36.13.C – No Surface Waste Management Facility Shall Exceed 500 Acres
  - 1.4 NMAC 19.15.36.13.D – The Operator Shall Not Accept Oil Field Wastes Transported by Motor Vehicle
  - 1.5 NMAC 19.15.36.13.E – The Operator Shall Not Place Oil Field Waste Containing Free Liquids in a Landfill or Landfarm Cell
  - 1.6 NMAC 19.15.36.13.F – Surface Waste Management Facilities Shall Accept Only Exempt or Non-Hazardous Waste
  - 1.7 NMAC 19.15.36.13.G – Operator of a Commercial Facility Records
  - 1.8 NMAC 19.15.36.13.H – Disposal at a Commercial Facility
  - 1.9 NMAC 19.15.36.13.I – Migratory Bird Projection
  - 1.10 NMAC 19.15.36.13.J – Surface Waste Management Sign
  - 1.11 NMAC 19.15.36.13.K – The Operators Shall Comply with the Spill Reporting and Corrective Action Provisions of 19.15.30 NMAC or 19.15.29 NMAC
  - 1.12 NMAC 19.15.36.13.L – Operator Inspection and Maintenance Plan

- 1.13 NMAC 19.15.36.13.M – Operator Plan to Control Run-On Water onto the Site and Run-Off Water from the Site
- 1.14 NMAC 19.15.36.13.N – Contingency Plan
- 1.15 NMAC 19.15.36.13.O – Gas Safety Management Plan
- 1.16 NMAC 19.15.36.13.P – Training Program

**NMAC 19.15.36.14 - SPECIFIC REQUIREMENTS APPLICABLE TO LANDFILLS**

**1.0 NMAC 19.15.36.14 - INTRODUCTION**

- 1.1 NMAC 19.15.36.14.A(1) – Working Face and Compaction
- 1.2 NMAC 19.15.36.14.A(2) - Access Control
- 1.3 NMAC 19.15.36.14.A(3) – Fire Prevention and Extinguishing
- 1.4 NMAC 19.15.36.14.A(4) – Litter and Odor Control
- 1.5 NMAC 19.15.36.14.A(5) – Prohibited Excavation of Closed Cells
- 1.6 NMAC 19.15.36.14.A(6) – Daily Cover Requirements
- 1.7 NMAC 19.15.36.14.A(7) – Intermediate Cover Requirements
- 1.8 NMAC 19.15.36.14.A(8) – Closure Requirements
- 1.9 NMAC 19.15.36.14.B(1)&(2) – Vadose Monitoring Program
- 1.10 NMAC 19.15.36.14.C – Landfill Design Specifications
- 1.11 NMAC 19.15.36.14.C(1) – Base Layer
- 1.12 NMAC 19.15.36.14.C(2) – Lower Geomembrane Liner
- 1.13 NMAC 19.15.36.14.C(3) – Geonet/Geocomposite
- 1.14 NMAC 19.15.36.14.C(4) – Upper Geomembrane Liner
- 1.15 NMAC 19.15.36.14.C(5) – Leachate Collection and Removal System
- 1.16 NMAC 19.15.36.14.C(6) – Protective Soil Layer
- 1.17 NMAC 19.15.36.14.C(7) – Placement of Waste
- 1.18 NMAC 19.15.36.14.C(8)&(9) – Landfill Final Cover Design
- 1.19 NMAC 19.15.36.14.C(10) – External Piping
- 1.20 NMAC 19.15.36.14.D(1)(a)-(c) – Liner Specifications and Requirements
- 1.21 NMAC 19.15.36.14.E – Requirements for the Soil Component
- 1.22 NMAC 19.15.36.14.F – Leachate Collection and Removal System Placement
- 1.23 NMAC 19.15.36.14.G – Landfill Gas Control System
- 1.24 NMAC 19.15.36.14.H(1)-(4) – Landfill Gas Response Plan

**NMAC 19.15.36.15 – SPECIFIC REQUIREMENTS APPLICABLE TO LANDFARMS**

**1.0 NMAC 19.15.36.15 – SPECIFIC REQUIREMENTS APPLICABLE TO LANDFARMS**

**NMAC 19.15.36.15 – SMALL LANDFARMS**

**1.0 NMAC 19.15.36.16 – SMALL LANDFARMS**

**NMAC 19.15.36.17 – SPECIFIC REQUIREMENTS APPLICABLE EVAPORATION, STORAGE,  
TREATMENT, AND SKIMMER PONDS**

- 1.0 NMAC 19.15.36.17 – INTRODUCTION
  - 1.1 NMAC 19.15.36.17.A – Engineered Design Plans
  - 1.2 NMAC 19.15.36.17.B – Construction Standards
  - 1.3 NMAC 19.15.36.17.C – Operating Standards
  - 1.4 NMAC 19.15.36.17.D – Below-Grade Tanks and Sumps
  - 1.5 NMAC 19.15.36.17.E – Closure Required

**NMAC 19.15.36.18 – CLOSURE AND POST-CLOSURE**

- 1.0 NMAC 19.15.36.18 - INTRODUCTION
  - 1.1 NMAC 19.15.36.18.A – Surface Waste Management Facility Closure by Operator
  - 1.2 NMAC 19.15.36.18.B – Release of Financial Assurance
  - 1.3 NMAC 19.15.36.18.C – Closure Initiated by Division & Forfeiture of Financial Assurance
  - 1.4 NMAC 19.15.36.18.D – Cell Closure and Post-Closure
  - 1.5 NMAC 19.15.36.18.E – Pond and Pit Closure
  - 1.6 NMAC 19.15.36.18.F – Landfarm, Pond and Pit Post-Closure
  - 1.7 NMAC 19.15.36.18.G – Alternates to Revegetation

**TABLES**

- Table 1 – C.K. FACILITY
- Table 2 – SITE LIFE

**NMAC 19.15.36.19 – EXCEPTIONS AND WAIVERS**

- 1.0 NMAC 19.15.36.19 – EXCEPTIONS AND WAIVERS
  - 1.1 NMAC 19.15.36.19.A – Alternatives to Requirements
  - 1.2 NMAC 19.15.36.19.B – Exceptions to, Waivers of, or Approved Alternatives to Requirements in an Emergency without Notice or Hearing

**NMAC 19.15.36.20 – TRANSITIONAL PROVISIONS**

- 1.0 NMAC 19.15.36.20 – TRANSITIONAL PROVISIONS

**ATTACHMENT A – GENERAL FACILITY MAPS AND SITE DRAWINGS**

**ATTACHMENT B – ENGINEERED DESIGN PLAN**

**ATTACHMENT C- SOIL AND LINER QUALITY CONTROL PLAN (SLQCP)**

- 1.0 INTRODUCTION
  - 1.2 Definitions
- 2.0 GEOSYNTHETIC CLAY LINER (GCL)
  - 2.1 General
  - 2.2 Submittals
  - 2.3 Delivery, Storage, and Handling
  - 2.4 Materials
  - 2.5 Manufacturer
  - 2.6 Warranty
  - 2.7 Execution
  - 2.8 Equipment
- 3.0 GEOMEMBRANE LINING (FML)
  - 3.1 General
  - 3.2 Submittals
  - 3.3 Quality Assurance
  - 3.4 Delivery, Storage, and Handling
  - 3.5 Products
  - 3.6 Installation Procedures
  - 3.7 Field Quality Control
- 4.0 LEACHATE COLLECTION SYSTEM
  - 4.1 Granular Drainage Media
  - 4.2 Geocomposite Drainage Materials
  - 4.3 Leachate Chimneys
  - 4.4 Drainage Layer Placement
- 5.0 LEAK DETECTION SYSTEM
  - 5.1 Installation
- 6.0 BALLAST/PROTECTIVE COVER
  - 6.1 General
  - 6.2 Ballast
  - 6.3 Protective Cover
- 7.0 GCLER, GMLER, AND CONSTRUCTION DOCUMENTATION

**FIGURES**

Figure C.1 - Horizontal GCL Seam

**TABLES**

- Table C.1 - Standard Tests on Geosynthetic Clay Liner Materials
- Table C.2 - Standard Tests on Hdpe Gml Material
- Table C.3 - Standard Tests on Geotextile Materials
- Table C.4 - Standard Tests on Geocomposite Material

**ATTACHMENT D - FINAL COVER QUALITY CONTROL PLAN**

- 1.0 INTRODUCTION
  - 1.1 Definitions
- 2.0 CONSTRUCTION QUALITY ASSURANCE FOR ALTERNATIVE COVER SYSTEM
  - 2.1 Introduction
  - 2.2 Earthwork Construction
  - 2.3 Survey and Final Topography
  - 2.4 Sampling and Testing
- 3.0 CONSTRUCTION QUALITY ASSURANCE FOR THE PRESCRIPTIVE COVER SYSTEM WITH GEOCOMPOSITE
  - 3.1 Introduction
  - 3.2 Earthwork Construction
- 4.0 DELIVERY, STORAGE AND HANDLING
- 5.0 PRODUCTS
- 6.0 INSTALLATION PROCEDURES
- 7.0 FIELD QUALITY CONTROL
  - 7.1 Survey and Final Topography
  - 7.2 Sampling and Testing
  - 7.3 Vegetation Planting Plan
  - 7.4 Soil Preparation and Seeding
  - 7.5 Fertilizer Recommendations
  - 7.6 Documentation
  - 7.7 Preparation of FCER

**TABLES**

- Table D.1 - Standard Tests on HDPE GML Material
- Table D.2 - Standard Tests for Geocomposite Materials
- Table D.3 - Standard Tests on Geotextile Materials
- Table D.4 - Seed Mix and Rate

**ATTACHMENT E: HELP MODEL**

- 1.0 LEACHATE COLLECTION, REMOVAL SYSTEM – 19.15.36.14(C)(F)
  - 1.2 Hydrologic Evaluation of Landfill Performance (HELP) Model
  - 1.3 Liner System Design
  - 1.4 Liner Simulation Results
- 2.0 LANDFILL CAP DESIGN – 19.15.36.14(C)(9)
  - 2.1 Final Cover Design
  - 2.2 Prescriptive Final Cover Design with Geocomposite Replacing the Gravel Layer HELP Model Inputs

- 2.3 Alternate Final Cover with Geocomposite Replacing the Gravel Layer System Simulation Results Alternative Final Cover HELP Model Inputs
- 2.4 Alternative Final Cover System Simulation Results
- 2.5 Alternate Final Cover System Simulation Results

**APPENDICES**

- APPENDIX A – HELP MODEL USER GUIDE
- APPENDIX B – PRESCRIPTIVE LINER HELP MODEL DEMONSTRATION
- APPENDIX C – ALTERNATE LINER HELP MODEL DEMONSTRATION
- APPENDIX D – ALTERNATE GEOCOMPOSITE FINAL COVER HELP MODEL DEMONSTRATION
- APPENDIX E – ALTERNATE SOIL FINAL COVER HELP MODEL DEMONSTRATION

**TABLES**

- Table E.1 - Prescriptive Liner System Design
- Table E.2 - Alternate Liner System Design
- Table E.3 - HELP Model Results
- Table E.4 - Prescriptive Final Cover Design with Geocomposite Replacing the Gravel Layer
- Table E.5 - Alternate Final Cover Design

**ATTACHMENT F – GEOSYNTHETIC AND PIPE DOCUMENT**

**ATTACHMENT G – HYDROGEOLOGY REPORT**

**ATTACHMENT H – VADOSE MONITORING PLAN**

**ATTACHMENT I – SAMPLING AND ANALYSIS PLAN**

**ATTACHEMENT J - DRAINAGE STUDY**

- 1.0 INTRODUCTION
  - 1.25 Summary of Calculation Methods
  - 1.26 Existing Site Hydrology
  - 1.27 Post-Development Site Hydrology
  - 1.28 Existing/Post-Development Hydrology Comparison
  - 1.29 Hydraulic Structure Design
  - 1.30 Erosion Control
  - 1.31 Conclusions

**APPENDICES**

- APPENDIX A - EXISTING DRAINAGE
- APPENDIX B - DEVELOPED DRAINAGE
- APPENDIX C - DEVELOPED HYDRAULIC STRUCTURES
- APPENDIX D - SELECTED PAGES – REFERENCE MATERIAL

**FIGURES**

- Figure J.1 - Existing Drainage Area
- Figure J.2 - Existing Drainage Schematic
- Figure J.3 - Soils Map
- Figure J.4 - Developed Drainage Areas
- Figure J.5 - Developed Drainage Schematic
- Figure J.6 - Developed Drainage Structure Plan
- Figure J.7 - Final Cover Drainage Structure Plan
- Figure J.8 - Detention Pond Details
- Figure J.9 - Nearest Ephemeral Water

**TABLES**

- Table J.1 - 25-Yr. Hydrology: Existing
- Table J.2 - 25-Yr. Hydrology: Proposed

**ATTACHMENT K - SITE OPERATION PLAN**

- 1.0 INTRODUCTION
- 2.0 PERSONNEL, TRAINING, AND SITE EQUIPMENT
  - 2.1 Personnel
  - 2.2 Training and Experience
  - 2.3 Equipment
- 3.0 GENERAL FACILITY INFORMATION AND OPERATIONAL REQUIREMENTS
  - 3.1 Access Control
  - 3.2 Site Security
  - 3.3 Site Signs and Traffic
  - 3.4 Noise Control
  - 3.5 Odor Control
  - 3.6 Dust Control
  - 3.7 Minor Spills/Releases
- 4.0 C.K. FACILITY OPERATIONS
  - 4.1 Landfill Phasing Plan
  - 4.2 Waste Characteristics
  - 4.3 Waste Acceptance
  - 4.4 Prohibited Waste

- 4.5 Waste Capacity and Site Life
- 4.6 Gas Safety
- 4.7 Leachate Monitoring
- 4.8 Operating Hours
- 5.0 LIQUIDS PROCESSING
- 6.0 WATER TREATMENT AND REUSE
  - 6.1 Stripping Tower
  - 6.2 Greensand Filters
  - 6.3 Reverse Osmosis
- 7.0 INSPECTION AND MAINTENANCE
  - 7.1 Evaporative Spray System
  - 7.2 Landfill
  - 7.3 General Facility Operation
  - 7.4 Liquid Processing Area
  - 7.5 Pond Operations

**APPENDICES**

- APPENDIX A – H<sub>2</sub>S MANAGEMENT PLAN
- APPENDIX B – CONTINGENCY PLAN
- APPENDIX C – OCD FORMS
- APPENDIX D – EVAPORATION CALCULATIONS

**TABLES**

- Table K.1 – Necessary Site Personnel
- Table K.2 – Landfill Facility Equipment List
- Table K.3 – Estimated Site Life
- Table K.4 – Facility Inspections

**ATTACHMENT L - CLOSURE PLAN AND POST-CLOSURE PLAN**

- 1.0 FINAL CLOSURE ACTIVITIES
  - 1.1 Closure Procedures
  - 1.2 Post-Closure Plan
  - 1.3 Financial Assurance

**APPENDICES**

- APPENDIX A – COST ESTIMATE

**APPENDIX A**  
**HELP MODEL USER GUIDE**

**APPENDIX B**

**PRESCRIPTIVE LINER HELP MODEL DEMONSTRATION**

**APPENDIX C**

**ALTERNATE LINER HELP MODEL DEMONSTRATION**