



STATE OF NEVADA  
Department of Conservation & Natural Resources  
DIVISION OF ENVIRONMENTAL PROTECTION

 COPY

Brian Sandoval, Governor  
Leo M. Drozdoff, P.E., Director  
Colleen Cripps, Ph.D., Administrator

02/07/2012

Ryan Williams  
Western Elite Inc.  
6345 E. Bonanza  
Las Vegas, NV 89110

Reference: With respect to Western Elite Inc. and the correspondence dated 10/25/2011 [Western Elite, Inc. Class I Landfill Permit Application] Response to Nevada Division of Environmental Protection (Division) Comments

Subject: Preliminary Technical Review of Class I Modification Request (Request)

Dear Mr. Williams:

The Division is providing this review of your application for Class I Municipal Solid Waste (MSW) Facility. In light of the extensive comments, the Division will be continuing to review the modification request as necessary. The NDEP will not assume "no leakage" through the liner, or remove from consideration further protective measures for the groundwater as the site is restricted;

*NAC 444.678 Location restrictions: Generally. (NRS 444.560) The location of a Class I site must:*

...

*9. Unless approved by the solid waste management authority, not be within 1,000 feet of any surface water or 100 feet of the uppermost aquifer if the site is approved after September 2, 1992.*

Accordingly, the Division is rejecting the proposed design; please re-submit for review and comment. When submitting please bear in mind that no-releases from this landfill will be permitted and as such the design must show no leakage for both the operational and post-closure life of the landfill.

Please note that all recordkeeping must be maintained onsite for the life of the facility. Please make the appropriate changes throughout the document.

Remove the engineering stamps from all documents that do not require an engineered design.

Please provide an updated Class I Municipal Solid Waste Disposal Site Application for the proposed Class I facility (enclosed)

NAC 444.645(2)

Please provide a summary of the QA/QC Plan for all liner systems as inclusion into the application to include as a portion of the technical review of the application.



*NAC 444.700 Facilities for personnel. (NRS 444.560) Suitable shelter and sanitary facilities must be provided for operating personnel and waste transport personnel.*

Please provide a complete description of the facilities that will be used by the people working onsite and visiting personnel.

*NAC 444.680 Report of design.* Please provide the following:

...

4. **Define** the population and area(s) to be served by the site.
5. **Define** the anticipated types, quantities and sources of solid wastes (and special wastes) to be disposed of at the site.

Provide updated water level gradients using all the data acquired for review in conjunction with updated gradients.

The format takes the following;

1. Review of previously requested items
2. General Comments
3. Specific Comments

### **Previous Items**

- R\_1. Borrow soils will be excavated from Lot 12. A revised drawing (Drawing #1B) has been prepared showing this area (and the requested soil material balance) and has been attached to this response.*
- C\_1. No comment at his time.*
- R\_2. Per our conversation, since the alternate liner will be more protective of human health and the environment (since it will generate less leakage through the liner and hence pose less of a risk to groundwater) it can be used in this design. Section 11.1 of the revised Design Report describes the liner section in detail. It is also shown on the drawings.*
- C\_2. The Division does not approve of alternative liners within 100 feet of groundwater over the phone or at any other time without a formally submitted design.*
- R\_3. Detail WI 3A has been prepared and is included with this response.*
- C\_3. No comment at his time.*
- R\_4. WEI has calculated the volumes of the sumps and they are as follows: North Sump 36.99 cubic yards and South Sump 41 .09 cubic feet. Although the base grades have been raised (to be more protective of groundwater), the volume and dimensions of the sumps will not change appreciably. This is due to the fact that the design of these sumps from the Class III Application were based on waste using MSW (Class I) material.*
- C\_4. Please confirm the design volume of the South sump.*

- R\_5. *Based on our conversation, and for ease of use and DEP review, WEI has provided these items in the stand-alone Integrated Sitewide Contingency Plan [ISCP] (which is attached to this response). This includes all emergency response documentation.*
- C\_5. See Specific Comments below.
- R\_6. *All stormwater calculations and conveyance structures were approved in the Class III application. Since the design is unchanged it is Western Elite's opinion that the previous design should suffice. Detention basins 1 and 2 with all channels are shown on the drawings. For informational purposes, we have included the approved stormwater design and calculations in the revised Design Plan that is attached to this response.*
- C\_6. No comment at this time.
- R\_7. *This information has been provided on Drawing Nos: I A, 1B and 15 of this revised Permit Modification application. These drawings are attached to this response.*
- C\_7. No comment at his time.
- R\_8. *OW-1 through OW-7 are the permitted, groundwater monitoring wells for the facility. The designation of these wells has been changed on the legend sheet (Drawing #OA) to provide clarity. The narrative detailing their purpose and construction can be found in Sections 3.2 and 4.0 of the revised Groundwater Monitoring Plan (attached to this response).*
- C\_8. See comments below.
- R\_9. *Western Elite has made the suggested changes (please see sections 5.1.1, 5.1.4, 5.1.5, 5.2, 5.2.4, 5.2.5) and has provided the entire revised Groundwater Monitoring Plan with this response. Specifically, Tables 4 and 5 have been revised per your request and these tables are shown in the revised Groundwater Monitoring Plan*
- C\_9. See comments below.
- R\_10. *Western Elite has made the suggested changes (please see Sections 6.0, 6.1, 6.2, 6.3 and Table 5) and has provided the entire revised Groundwater Monitoring Plan with this response.*
- C\_10. See comments below.
- R\_11. *Western Elite is not proposing any new buildings or structures to be constructed as part of this permit modification application, but has added all existing structures to this drawing as suggested.*
- C\_11. No comment at his time.
- R\_12. *It is our understanding that DEP is referencing the construction of the landfill gas (LFG) boundary probes (BP). Per the DEP-approved permit, probes BP-1 through BP-4 have already been constructed to monitor LFG at the facility. Since they are already in place, WET is proposing to keep these to monitor LFG at the 60 foot interval at the facility. An additional 30 boundary probes (BP-5 through BP-34) have been proposed as part of this permit modification application. Per your suggestion, the screens for all new BPs will be manufactured in the factory as shown on the schematic ( in the Decomposition Gas Monitoring Plan), and the depth of each probe has been chosen to maximize the potential for detecting a release of LFG from the*

landfill. The justification for screen length, lithology screened and installation procedures are described in the revised Decomposition Gas Monitoring Plan (screen length and installation procedures) and Drawings I 5 through 18 (lithology screened) of the revised permit modification drawings. These are attached to this response.

R\_13. See comments below.

### **General Comments**

Generally there is no unified or cogent "Plan of Action" in the ISCP addressing emergencies, spills, accidents, acts of God etc., the Division can approve. A plan of action should include, at a minimum, the items identified in Section 5 of the previously provided ISCP and/or;

1. Clear conditions under which activating the ISCP would be necessary; and a clear chain of command and designation of the person authorized to order an evacuation or shutdown.
2. Clear and concise events that would trigger the activation of the contingency plan.
3. Include an employee alarm/contact system. The employee alarm system should use a system must use a distinctive signal for each purpose and comply with the requirements in § 1910.165.
4. Designate and train employees to assist in a safe and orderly evacuation of other employees.
5. Specific evacuation procedures; including maps, routes and exits;
6. Procedures for assisting visitors and employees to evacuate, particularly those with disabilities or who do not speak English;
7. Designation of what, if any, employees will remain after the evacuation alarm to shut down critical operations or perform other duties before evacuating.
8. Special equipment for employees.
9. A means of accounting for employees after an evacuation;
  - Designated (mapped) assembly areas or areas, outside the landfill, where employees should gather after evacuating.
  - Take a head count after the evacuation. *Identify the names and last known locations of anyone not accounted for and pass them to the person in charge.*
  - Establish a method for accounting for non-employees such as suppliers and customers
  - Include procedures for further evacuation in case the incident expands.
10. The employer should provide training to each employee to use PPE as necessary.
11. If you have reason to believe that any affected employee who has already been trained does not have the understanding and skill include retraining each such employee. Retraining may be required where:
  - Changes in the workplace render previous training obsolete; or
  - Changes in the types of PPE to be used render previous training obsolete; or
  - Inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.
12. Review of emergency action plan. Include a review of the emergency action plan with each employee covered by the plan:
13. When the plan is developed or the employee is assigned initially to a job;
14. When the employee's responsibilities under the plan change; and
15. When the plan is changed.

Remove the engineering stamp from this document, the State of Nevada is a discipline specific state, this is not an engineering document and should be prepared under the direction of an individual qualified in the preparation of emergency/contingency plans (Industrial Hygienist, etc.).

The Table of Contents is paginated incorrectly please correct.

In **all** cases, remove the phrase (or any similar) and/or "...include but are not limited to the following", or "examples", should etc. please be **specific** as to what requirements are necessary for the operation of the landfill.

### **Specific Comments** Integrated Site wide Contingency Plan (ISCP)

#### **Section 1**

Remove the second sentence.

Define "Special Problems".

#### **Section 2 Core Plan Elements**

This section merely restates NAC 444.684, please remove. The Division is aware of the requirements; do not restate the regulations. Please include **all** the specific situations for the landfill that are incorporated in this section the ISCP will be covering; Activation, Training, Response, etc...

#### **Site Personnel Staffing and Training**

There is no training or skills included in Section 3.0 Facility Information the Division can approve. An overview of the ISCP, a review of permits and unidentified "landfill safety procedures", etc. is insufficient. Are Management Personnel the same as the Landfill Supervisor? Will there be ongoing landfill operational training for all employees to satisfy NAC 444.684, please clarify? Please include detailed training requirements for the landfill (PPE, Communication, Inspections, Landfill Operations, etc.). The Sitewide Coordinator is not included in this section please clarify (see comment below). For the Landfill Supervisor, Equipment Operator and Scale Operator there is no ongoing training specified. What form, i.e. weekly tailgate safety briefings, annual refreshers etc., will the safety practice training take, please clarify?

#### **Section 3.1 Personnel**

Last sentence; please specify the training that will be completed by management personnel, and other personnel at the landfill. The Environmental Industry Association does not offer Landfill Operations Courses, please be specific as to what course(s) will be taken for landfill operations training including any ongoing training.

Include at least the minimum number of employees that will be required to operate the site in a safe manner for review. As litter control is required on a daily basis please include sufficient staff to perform this duty as well.

#### **Section 3.2 Landfill Supervisor**

The statement of "...any combination of education and experience..." is too broad. The Division will not approve of these minimal requirements for supervisory personnel. Please detail the requisite skill and experience set necessary for all personnel. There are no training requirements associated with this position, please clarify. Also, the Division is requiring a position of requisite authority to determine when to activate the ISCP. This is noted as the Site Wide Coordinator (SWC), but this position does not appear to be described in Section 3.1, please clarify. Will this position be responsible for the record keeping requirements of NAC 444.7025?

There is no mention of a contingency should a worker become ill or injured on the job, nor CPR Training nor any mention of First Aid certifications (NAC 444.684) for worker care. Western Elite (WEI) may use ANSI Z308.1 - 2003, Minimum Requirements for Workplace First Aid Kits, copy attached for guidance. The statement "...in most scenarios..." (Section 4 Scope and Applicability of the Site Health and Safety Plan) lacks specifics, while a truck hitting personnel is certainly within the constraints of a Health and Safety program there are many more instances of worker risk at a landfill, there is no mention of buddy systems, operations during non-daylight hours (24 hour facility). Nor is there any identification of workplace hazards or performing tasks during inclement weather or during nighttime operations. Will Western Elite be installing floodlights to ensure worker safety?

### Section 3.2 Equipment Operator

As a part of the job description it appears it is meant to satisfy NAC 444.6665(c)(d)(e), please include specific training requirements for review and approval by the Division.

With respect to Section 6 Management of Hazardous Waste and Section 6.3 Pre-Screening and Inspections, the Division has the following comments;

1. Please note the definition of Hazardous Waste is far more inclusive than the characteristic list provided. Please include the entire listing of hazardous wastes as specified in NAC 444.6665(2) unless otherwise excluded.
2. Clarify what is meant by "...materials offering an undue hazard to landfill personnel..."
3. Please provide a definitive list of unacceptable wastes and/or wastes that will not be accepted at the landfill. Remove the liquid waste acceptance from this section as it is a separate determination from hazardous waste (but may be inclusive).

While the generator has responsibilities to make a hazardous waste determination, the facility must also have a plan in place pursuant to NAC 444.6665 to prevent disposal of hazardous waste. Section 6.3 permits the unloading of wastes at the working face and making determinations at that point. The Division cannot approve this, please provide a procedure that includes identification of waste *prior* to unloading at the working face. Please be specific as to what training will be employed by the facility in providing personnel on how to recognize, handle and report hazardous waste in accordance with NAC 444.6665(c)(d)(e).

### Test Methods

Remove the reference "...prior to acceptance of an unknown waste..." no unknown waste can be accepted at the landfill. All waste must have sufficient knowledge associated with to determine whether it is a hazardous waste or not.

### Section 6.3

How will Facility personnel be trained to identify unauthorized waste and perform the response to such? Define in detail the process and documentation that will occur to prevent the acceptance of any and all unauthorized wastes at the landfill.

Will the landfill be accepting Conditionally Exempt Small Quantity Generator waste in accordance with NAC 444.6665?

## Section 6.5-6

Should hazardous waste be identified onsite, Western Elite would then become the generator and be required to conform to the requirements of 40 CFR 261 et al. Please include these requirements for the management of Hazardous Waste.

Please include the particular PPE requirements as specified in the OSAH regulations for the protection of onsite workers.

### **Fire Response – Sections 4.2 & 4.3**

Will a Site Wide Emergency Coordinator be on site at all times? Only one alternate is specified. Please provide the type of First Aid Kit(s), supplies and placement(s) availability. Please provide the Kit descriptions, inspections thereof and placements; map(s) included.

### **Personnel Safety – Section 4.0**

Please include the following requirements of NAC 444.684 *Safety and Training of personnel and users of the site, including [safety] training for employees on first aid and the availability of emergency services*. There is no OSHA form 101 or 200, please clarify.

#### Section 4.1 Employee Training and Safety

Site wide Coordinator (SWC) appears to be making medical assessments, what training and/or qualification(s) does/will the SWC have with respect to medical triage?

#### Section 4.3 Fire Control Plan

First paragraph, how will the SWC be notified?

### **Landfill Shutdown**

Pursuant to NAC 444.670, please provide an organized and coordinated course of action, rather than options, inclusive of timeframes and specific instances when closure of the landfill would be necessary. The Division has no authority to approve storage of waste at the facility. Any waste that is in transit or onsite must be disposed of in the permitted footprint. There can be no further acceptance of wastes until the cause of landfill shutdown has been resolved. Please clarify this section.

### **Equipment Breakdowns**

NAC 444.684 Plan for operating (4)(d), (Section 3.6).

This section explains the type of equipment, not what will occur in the event of an equipment breakdown, please clarify. In addition to describing the equipment necessary to operate the site in this event; it should, as well, provide for continued operation of the site with complete equipment descriptions (number of equipment pieces and types) and backup equipment. Please define what will occur if equipment breaks down with backups as required.

### **Hazardous Materials Release**

This section references Section 6 which is title Management of Hazardous Waste releases appear to be discussed in Section 5 Emergency Response/Contingency Plan, please clarify? The regulatory requirement is referenced in NAC 444.684(4)(e) this section does not satisfy any of this. Please clarify. NAC 445A.347 is an incorrect reference, the correct reference should be NAC 444.684(4)(e)

## Leachate Release

This section appears to be to comply with NAC 444.684(4)(f). There are two requirements for this. 1) is when leachate is discovered in a structure which was *previously dry*, and 2) if a spill or leak occurs from a tank or impoundment. Please include defined steps **for both cases** that will be taken in this event. Address whether a release has occurred within the confines of the Groundwater Monitoring Plan elsewhere.

## General Comments

The plan is very general and lacks the necessary detail. Calibration procedures, frequencies, durations and sampling equipment manufacturer's specifications have not been provided. Quality Control procedures have not been discussed. Provide specifications of all detection equipment to be used. Include calibration procedures.

Include the following data quality parameters:

- Percent of attempted sampling events were successful.
- Accuracy of reported sampling results.
- Precision of reported sampling results.
- Oxygen levels in samples, indicating leaking well casing or faulty sampling equipment.
- What percent of the monitoring wells/probes are either saturated with water or do not provide a consistent methane reading?

The Division does not require sampling for hydrogen sulfide. You may do so, if you wish. A discussion of underground utilities and associate preferred gas migration pathways has not been provided or evaluated. These preferred pathways must be sampled to evaluate gas migration pathways.

## Appendices:

Appendices are referenced in the document but not properly labeled. For example: Page 5, first line: "The specifications for the construction of the probes are shown in Appendix II." However, when searching for Appendix II, the document is not labeled as Appendix II. Same applies for Appendix I and Appendix III.

## Section 13900 Landfill Gas Migration Monitoring Probe (Boundary Probe)

Nowhere in the document is Section 13900 referenced. Is this intended to be Appendix I? Please clarify.

## Section 13910 Passive Landfill Gas Vent

Nowhere in the document is Section 13910 referenced. Is this intended to be Appendix II? Please clarify.

## Specific Comments;

Page 1, 1.0 Introduction:

Paragraph three: "...as required by the Nevada Administrative Code (NAC) 444.735, which requires the owner/operator of Class I landfills..." This is an incorrect reference. This regulation addresses the location of a Class III landfill. "Additional requirements addressed by this plan include those under NAC444.667.1 (j), this is an incorrect reference. There is no such regulation subheading.

Page 2, 1.0 Introduction:

Second to last paragraph, last sentence;

“Four existing boundary probes have been installed as shown in the design drawings.” Add: “and 30 new probes will be installed.”

Page 3, 2.1 Boundary Probe Installations:

The Division remains concerned that the four existing boundary probes (BP-1-BP) may serve as a conduit for gases to migrate to shallow groundwater. Please provide documentation that demonstrates that groundwater was not encountered during installation of these points. If groundwater was encountered, these points should be abandoned and new probes should be installed without penetrating groundwater. This is required to minimize the potential for future negative impacts to groundwater.

Page 5, 2.2 Decomposition Gas Program:

What equipment will be used to conduct atmospheric monitoring?

Please provide all equipment specifications and manufacturers documentation including recommended equipment operation procedures, specifically, how is the equipment to be operated? At what height is the meter held above the ground? How will the operator be trained? How is the equipment calibrated, in the field, before each use, after each use to determine if it was damaged in the field? How often is equipment calibrated by the manufacturer?

4th paragraph, last sentence: Add the exact location at the boundaries that the samples were collected.

5th paragraph first sentence: “As discussed previously.....” Provide reference to where this was discussed previously. Where it had been discussed previously could not be found.

5th paragraph last sentence: Please remove all of this language.

Page 6, 3.0 Decomposition Gas Control:

1st bullet: Provide the specific reference, exact name of report, location, page number etc. for “Emergency Plan”.

5th bullet: Remove the phrase: “When technically practicable...”

Landfill Gas Monitoring Log:

Add exact location of perimeter sampling points. Add oxygen to the sampling log. Hydrogen Sulfide is not required.

Section 3.01 Drilling (E.): specifies solvent cement is to be used. Solvent cement contains Volatile Organic Compounds (VOC) that can contaminate shallow groundwater or trigger false positive readings when sampling for methane. All well casing fittings must be threaded fittings and must be specified as such. Please make necessary revisions to any section where Solvent cement is specified.

Please provide the certification in accordance with NAC 444.7483 Requirements concerning system for monitoring groundwater.

- (5) The number, spacing and depths of the monitoring systems must be:
- (b) *Certified by a qualified groundwater scientist and approved by the solid waste management authority. Within 14 days after receiving certification and approval, the owner or operator shall place the certification in the records for the site.*

For the purposes of monitoring the site the maximum hydraulic conductivity will be used for determining the movement of contaminants beneath the site and for establishing the groundwater monitoring network at the facility.

Section 4.0 Groundwater Monitoring Network:

Remove the word "table"

Provide the hydraulic conductivity for the sand and gravel layer for inclusion into this section.

Section 4.1 Drilling Methods:

In all cases remove the word piezometer, they will not be permitted at this site. Specify the method of drilling for approval the reference to EPA methods is too vague.

Section 4.2:

Specify how the filter pack will be determined.

Monitoring well regulations are found at Nevada Administrative Code (NAC) 534.360 through 534.500. These regulations must be followed prior to installation, during drilling and construction, and decommissioning (including plugging and abandonment) activities related to the monitoring wells

Section 4.5 Monitoring Well Decommissioning:

See above.

Remove Section 4.5.1

Section 4.5.2

See above.

Section 5.0 Groundwater Monitoring Program:

Please state what type of data comparison is being made, upgradient vs. down gradient, intra-well etc. Generally it seems this section repeats itself, it would be clearer if there were specific sections that coincided with the regulations. For example;

Section I

Detection Monitoring Program

Constituents

Sampling/Schedule

Reporting

Section II

Assessment Monitoring Program

Constituents

Sampling/Schedule

Reporting

Etc.

Remove all references to Maximum Contaminant Levels (MCLs) as they are not relevant in the context of the Detection Monitoring Program. Also include a discussion of submission of the Constituents in section 5.1.1 and their statistical values to the Division for approval along with the statistical method pursuant to NAC 444.7485 (see comment below on Section 8.0).

Section 5.1.1 Constituents:

Please provide Tables 1 through 7 for review.

Section 5.1.5 Analytical Data Evaluation:

There may be a significant time lag between Phase I and Phase II Sampling, re-write to distinguish between the two phases and to include the statistical analysis as required by NAC 444.7485.

Section 5.2.5 Analytical Data Evaluation:

What is the purpose of this section, as well as Section 5.2.6?

Remove Section 5.2.7

Insert Section 5.4 into the detection monitoring constituent list.

Section 6.2 Leachate Monitoring Schedule:

Remove Appendix A constituents and insert Appendix I of 40 CFR 258.

Section 6.3 Leachate Monitoring Schedule:

Please clarify the last sentence, further is this not stated elsewhere?

Section 7.4 Analytical Procedures:

Re-write this section to be consistent with NAC 444.7485

Section 8.0 Statistical Analysis

Re-Write this section to reflect NAC 444.7485

Re-Write this section to reflect NAC 444.7487

Please correct the Table of Contents page numbers:

Remove Page iii, if it no longer applies.

You may also consider changing "Allowed Waste" to Class II waste to distinguish it from the Class I wastes.

Please remove all the blank areas of the documents, also please remove sections

9.6; place in the ISCP

10.2, through 10.8

Section 2.0 Personnel and Equipment:

First paragraph implies at least 3 supervisors will be in attendance with one operating during the night hours. Please reflect this in the ISCP.

Second paragraph, include the *minimum* number of employees necessary for the operation of the site, NAC 444.684(1).

Last paragraph, remove this and insert specific training, this has been commented on previously.

**Section 5.0 Waste Handling Procedures:**

Some of these wastes are to be accepted at the Class I Landfill section as well. Please reconcile the wastes to be accepted. If C&D wastes are to be accepted at the Class I area additional management must be included as “mixed, spread, covered with daily intermediate and final cover” is too broad please be specific.

**Section 5.2 Unauthorized Wastes:**

Please state the “measures” that have been incorporated.

**Section 3.5 Seismic Impact Zones:**

Remove the first paragraph; the Division will be making this determination in further reviews.

**Section 8.5 Medical Waste**

Remove the first sentence. Provide a management plan for medical waste that meets the requirements of NAC 444.646. Medical waste is defined at NAC 444.589. (Guidance document attached). Please re-write this section to reflect the definition and regulatory requirements. Please note that pathological waste is defined at NAC 444.600 affecting some of the categories in this section.

**Section 8.6 Petroleum Contaminated Soil:**

1<sup>st</sup> Paragraph, re-write to state that the generator is responsible for determining it is not a hazardous waste and that WEI will confirm this through sampling, analysis and recordkeeping. Include the “screening levels” for review and approval by the Division.

**Section 8.7 Water Treatment Plant Solids**

Water Treatment Plant solids are fundamentally different than Wastewater Treatment Plant solids. Please re-write this section to clarify the type of waste proposed to be accepted, the form of management and waste acceptance protocol associated with this waste stream. Remove all process descriptions; the Division is aware of the processes.

Provide design calculations for all anchor trenches on Drawing Sheet 13A.

Provide maximum seismic displacement for the liner system, both temporary and permanent

The drawings show a 12” drainage layer, please add a 24” operations layer over the top of this layer to act as additional protection for the liner in accordance with NAC 444.678.

**Section 6.1 Cell Development:**

Remove the last sentence, landfill cell development is unaffected by waste intake only the rate at which it occurs.

Section 6.2 Waste Placement:

Remove most of this narrative; replace it stating a 2 foot operations layer will be placed over the drainage layer with select waste. Include a description delineating the Class I area from the Class III area.

Section 10.0 Borrow and Stockpile Areas:

Remove the second sentence it conflicts with drawing 1B

Section 11.0 Liner

Remove the citation (it references a Class II facility) this modification is for a Class I facility. The final configuration of the liner system is yet to be determined. See comment above.

Section 11.1 Cells 6-10 and Piggyback Liner System

Show the anchor Trench for the Piggy Back liner system on Drawing 13A or B with calculations.

Remove this section until a final design configuration can be agreed upon.

Section 12.0 Stability:

There is no regulation NAC 444.6739; with respect to NAC 444.6795 this is a descriptive listing of what would be classified as an "Unstable Area" and how to make that determination. Please clarify whether the facility is in a seismic impact zone and/or in an unstable area.

Section 13.0 Liquids Management Systems:

Section 13.1.1; The percolation rate amounts to some 12,000 gallons of leachate released to the subsurface on a yearly basis, the Division will not permit a liner with any leakage rate. As a matter of note there is no threshold value in the Nevada Administrative Code permitting leakage through a liner. Please resubmit an amended liner design the Division can approve pursuant to NAC 444.678(9).

Section 13.1.2

A slope of at least 2% must be maintained to prevent clogging, please revise the base grading to reflect this. Remove the last sentence and describe exactly how leachate will be managed at the landfill.

Section 13.1.4

Remove the reference to calculations in the permit. There are no calculations in the permit, please refer to the correct section of the application.

Section 13.3

This references the stormwater ditches adjacent to the side-slope benches. This is Run-on, Run-off is control or washers that are within the footprint (meteoric or standing). Please re-write this section to describe the Run-off controls within the permitted footprint.

**Drawing Set**

Remove the Evacuation Route Map and include it the Contingency Plan

Drawing 1A:

**Drawing 1B:**

Provide the run-on flow contours showing the contributing watershed for each of the Detention Basins with flow channels

The borrow area is shown as the area occupied by the supporting structures, please provide soil sampling and analysis showing these soils are suitable in meeting daily, intermediate and final cover requirements.

**Drawing 2A:**

The piggy back cover is shown as being installed at the point in time as the Class I area is completely filled. Firstly, is this accurate if so, please include this in the narrative in the application. This will imply that Western Elite is incapable of accepting Class I material until this time and will be permitted as such.

Please provide Appendix VII as it relates to the Class I area for review and approval  
Provide a detail for the liner joints

**Drawing 3A:**

Please include a detail for the intersection of the leachate collection piping.  
It appears the leachate collection piping is running at an angle to the flow line of the base grade, how will leachate flow into and along the piping to be collected at the extremity of the landfill footprint?

**Drawing 4:**

Show all final configuration features, fencing, methane monitoring probes, groundwater wells, run-on controls, detention areas etc. as a Drawing 4A.

**Drawing 2A:**

No Comment at this time

**Drawing 8A:**

No Comment at this time

**Drawing 8B:**

No Comment at this time

**Drawing 11:**

No Comment at this time

**Drawing 11A:**

No Comment at this time

**Drawing 13A:**

This drawing has been commented on see above

**Drawing 13B:**

No Comment at this time

**Drawing 13C:**

No Comment at this time

**Drawing 15:**  
No Comment at this time

**Drawing 16 through 19:**  
No Comment at this time

Any questions regarding this may be directed to the undersigned at 775-687-9477 or  
[jtaylor@ndep.nv.gov](mailto:jtaylor@ndep.nv.gov).

Sincerely,



Jon Taylor PE CEM  
Staff Engineer III  
Solid Waste Branch  
Bureau of Waste Management

JT

cc: Cory Lytle, PO Box 307, Pioche, NV, 89043

enc: ANSI Z308.1 - 2003, Minimum Requirements for Workplace First Aid Kits  
Class I Municipal Solid Waste Disposal Site Application  
Groundwater Monitoring Report Guidance  
Medical Waste guidance document

File: 277\_jtaylor\_02072012\_10\_LTR\_Technical Review of Mod Request Cls III to Clas I.doc