



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor

Leo M. Drozdoff, P.E., Acting Director

Colleen Cripps, Ph.D., Acting Administrator

August 4, 2010

Erin Merrill
Recology
50 California Street, 24th Floor
San Francisco CA 941119796

Re: 1. Comments on Jungo Landfill Groundwater Monitoring Plan
 2. Nevada Division of Wildlife Questions and Requests for Information

Dear Ms. Merrill:

In accordance with NAC 444.7488 the Nevada Division of Environmental Protection (NDEP) is requiring an alternate list of parameters and monitoring schedule for the Jungo Landfill (facility), as otherwise required by NAC 444.7487. Specifically, NDEP's concern is that the Groundwater Monitoring Program must be as site specific as possible in order to provide a reliable indication of a release from the facility. To that aim, please modify Table 2 and by implication Table 3 of the Plan of Operations and Report of Design respectively to reflect the phased approach as discussed below.

Please insert the Phase 1 parameters below into the respective Tables 2 & 3. Remove those which will be used to solely provide additional information as to Groundwater Quality from the Detection Program. The Phase 1 detection parameters (and as amended later) will form the core of the Detection Monitoring Program. They will therefore trigger a determination of a Statistically Significant Increase (SSI) pursuant to NAC 444.7489. In addition please include a procedure within section 2.4.3 of the Groundwater Monitoring Plan that includes procedures for data entry error, sampling error and lab error evaluations prior to making a Statistically Significant Increase determination.

With respect to the Groundwater Monitoring Plan (Vol. III Plan of Operations) please revise in phases as follows;

Phase 1

Alternative Parameters

1. Total Organic Carbon (TOC)
2. Total Organic Halides (TOX)
3. pH
4. Specific Conductance
5. Chlorides
6. Sulfates
7. Total Kjeldahl Nitrogen
8. Nitrates
9. Nitrites
10. Chemical Oxygen Demand (COD)

Alternative Schedule

- Sampling from the groundwater wells for 12 continuous quarters
 - At the conclusion of 12 quarters submit the statistical analysis required by NAC.7485 within 180 days.
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Phase 1 must also include a biennial sampling event for the groundwater monitoring wells that includes *Appendix II to Part 258—List of Hazardous Inorganic and Organic Constituents*. Include narrative for both modifying the frequency and constituent list at a future date(s), and incorporate all modified monitoring frequencies in Section 2.2.5.

Phase 2

The NDEP is also requiring the sampling/monitoring of the leachate sumps to provide further information to determine the most appropriate detection monitoring program for the site. Therefore, Phase 2 must include Leachate Monitoring, (i.e. sampling of the leachate collection sumps) from the point in time leachate generation begins inclusive of a process for;

- Sampling the leachate collection sumps for 12 continuous quarters for *Appendix II to Part 258—List of Hazardous Inorganic and Organic Constituents, and Appendix A to Part 423 Priority Pollutants List*.

At the conclusion of Phase 2, Recology must submit an evaluation, within 180 days, of chemical constituents (both inorganic and organic) that can be regarded being consistently generated by the facility (i.e. leachate from the waste mass). These may therefore be considered as reliable groundwater detection parameters, for inclusion into the Detection Monitoring Program.

Phase 3

Submit a Re-evaluation of the initial parameters and the added parameters pursuant to NAC 444.7484 at the conclusion of 8 quarterly groundwater sampling events. Include this in Section 2.2.5 of the Groundwater Monitoring program.

Please provide additional information in section 2.1.5.2 Site Hydrology of Volume I Report of Design that incorporates the information gathered during the site investigation i.e., Appendix A, B and D. Please provide additional data and calculations that include describing the movement, both horizontal and vertical, of groundwater beneath the site. Include calculations and estimations of time, primary layers, and flow velocities etc. Provide some discussion on whether there may be a vertical gradient in the area, clarify whether it lies within a recharge or discharge area etc.

Please provide the design specifications for the “Colorado Silica Sands” filter pack for the groundwater monitoring wells.

Below are questions received from the Nevada Division of Wildlife (NDOW) seeking additional information on the Jungo Landfill Facility. As a request from a sister agency the NDEP is forwarding their comments for a response. Please respond directly to the NDOW questions and courtesy copy myself. I have also included a copy of the letter for your convenience.

The Nevada Department of Wildlife (NDOW) is seeking additional information in regards to the proposed operations at the Jungo Landfill Site for which your agency has received application. I

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understand that planning of the site is still in progress but this is probably the appropriate time for me to be asking these questions and to have my agency's concerns incorporated into site planning.

Landfills in general pose two distinct concerns for Wildlife and my agency:

- 1. Will the operation pose a threat or harm to any wildlife species (or their habitat) for which NDOW has jurisdiction? and,*
- 2. Will the landfill site pose an attractive nuisance contributing to the increase of nuisance wildlife species that frequent landfills such as rodents, coyotes, corvids (crows and ravens) gulls and other wildlife species?*

In order for NDOW to make these determinations we request consideration and information in regards to the following questions:

- What is the proposed project plan for construction-and operation?*
- Will open water be accessible on site to wildlife? Will it be toxic or hazardous? (wildlife mortality, injury)*
- If water will be ponded on site, an industrial pond permit may be required. (permitting)*
- Will wildlife be able to access the operational areas of the landfill? What kind of exclusion fencing is proposed for the site? (wildlife mortality, injury)*
- Will the refuse be capped nightly? (wildlife injury, hazards, attractant)*
- Will native vegetation be removed from the site to allow for construction of the proposed project? (habitat loss)*
- Will the disturbed operational areas be a source of weedy plant species that could spread to adjacent intact native vegetation? (habitat loss)*
- Will the site be a potential source for range fires? (habitat loss)*
- Will noise, lights, odors, smoke or other operational issues be generated at the site? (disturbance or attractant)*
- Will there be any site discharges? (wildlife hazards) How will windblown debris from the site be contained? (plastic bags and other debris = entrapment, injury)*
- Will there be a plan to restrict access to the site by birds, rodents and scavenger species (use by rodents, ravens, vultures, gulls and other birds, coyotes, skunks ...) that could go under, through or over fencing?*

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Please provide a response to these comments by September 30th 2010.

If you have any questions regarding the above, please do not hesitate to contact me at 775-687-9477 or jtaylor@ndep.nv.gov.

Sincerely,

Original signed

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

JT:jm

Enc Letter from Nevada Division of Wildlife

cc: Therese A. Ure, P.O. Box 12527, Portland, OR, 97212
Kenneth Haskell PE, 1009 Enterprise Way Suite 350, Roseville, CA, 95678
Steven Siegel, Dept of Wildlife, 1100 Valley Road, Reno, NV 89512

ec: Eric Noack, Art Gravenstein, Colleen Cripps, PhD, Acting Administrator

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