November 15, 2012

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Chris Seney
Nursery Products, LLC
PO Box 1439
Helendale, CA 92342

FINAL CONSTRUCTION QUALITY ASSURANCE REPORT, EAST WASTE PILE COMPOSTING PAD AND SURFACE IMPOUNDMENT A AND B, NURSERY PRODUCTS HAWES COMPOSTING FACILITY, SAN BERNARDINO COUNTY

On September 11, 2012, the California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received a revised Final Construction Quality Assurance Report, Waste Pile Composting Pad and Surface Impoundment A and B (Report), which was prepared by Zero Energy Institute, LLC., for the Nursery Products Hawes Composting Facility (Facility). The Report was submitted to satisfy Board Order No. R6V-2010-0010 (Board Order), section V.B., which requires Nursery Products to submit a technical report providing details of the construction activities conducted at the Facility, including construction of the waste piles and surface impoundments, and in response to Water Board staff comment letter dated July 11, 2012, on the Final Construction Quality Assurance Report received June 11, 2012. Water Board staff reviewed the Report and finds that it fails to adequately describe the installation and construction of this Facility and does not demonstrate that the Facility was constructed in accordance with accepted design plans, the Board Order, and California Code of Regulations (CCR), title 27.

Accepted Design Plan

Section 1.1, General Information, indicates that the Facility was constructed in accordance with the "approved Nursery Products Final Design, Construction Quality Assurance Plan & Technical Specifications as prepared by Geosyntec Consultants, dated May 2011." However, the design plan for the Facility dated January 24, 2012, with a subsequent letter dated March 29, 2012, was the revision accepted by Water Board staff on April 4, 2012. Please clarify by which version of the plan the Facility was constructed.

As-Built Drawings

Appendix E, Waste Pile and Surface Impoundments Post Grading As-Built Survey, provides surveyed elevations for the Waste Pile. The figure is barely legible due to the small font size, and is not legible in places where there are multiple survey locations overlapping. Additionally, the contours shown do not match the survey elevations. Furthermore, there were no pre-construction survey elevations or elevation contours provided. As such, Water Board staff cannot determine that the compost area was constructed with at least a one-foot thick engineering fill, and thus that the Facility was constructed in accordance with the approved design plan. Please provide revised figures to demonstrate the as-built conditions of the Facility, with legible survey readings, as-built contours using the post-construction survey, and a demonstration that the compost area was constructed in accordance with the approved design plan. The as-built drawings should show the entire layout of the Facility including the weigh station; the external and internal berms; the stormwater diversion berms and location of riprap, concrete aprons, and metal plates for water flow; sampling pipes for the leak detection sumps and the lysimeters; the locations of monitoring wells and production wells; office and parking space; disposal bins; and storage areas.

Facility Construction

This Report discusses a 12-acre portion of the Waste Pile that was not constructed. Until this area is constructed in accordance with the approved design plan and demonstration has been made to and accepted by the Water Board that construction has been completed in accordance with the approved design plan and CCR, title 27, discharge to this area **must not occur**.

Section 2.1, Facility Construction, and Section 5.2.2, Minor Deviations, indicate that the entire stormwater collection channel was lined with a 3-foot thick, ¼-ton rip-rap for erosion protection. Section 2.1.9, Upstream Stormwater Controls, indicates the upgradient stormwater diversion channel was constructed according to the design plan. However, these sections do not indicate whether the pyramat lining was installed per the approved design plan. Further, inspections of the Facility indicate the pyramat lining appears to the missing and the entire stormwater collection channel was not lined; only the western portion contains rip-rap. Again, detailed drawings of as-builts were not included in the Report and need to be provided.

Section 3.2 indicates the leak detection and monitoring systems were constructed in accordance with the Geosyntec Consultant design and specifies sections of the design plan. However, several iterations of the designs were submitted prior to final Water Board approval. Appendix C, HDPE & GCL CQC Documentation, Surface Impoundments A and B, provide as-built drawings for panel placement of GCL and HDPE for surface impoundments A and B. Appendix G, ZEI Response to RWQCB Review Comments, provides responses to Water Board staff comments with pictures and descriptions of the construction and installation of the lysimeters, leak detection and monitoring sumps, and the surface impoundments. Without detailed as-built drawings,

Water Board staff are unable to determine if the leak detection and monitoring systems, in addition to the waste pile and surface impoundments, were constructed in accordance with the final Water Board approved design plan and if the leak detection sumps and lysimeters will function properly.

General Comments

Appendix A, CQA Earthworks Testing for the Waste Pile Composting Area & Surface Impoundments A and B, indicate the Facility address is located at 14479 Cougar Road in Hemet, with a zip code of 92342. The City of Hemet is located in Riverside County, outside the boundaries of the Lahontan Region. Furthermore, the zip code of 92342 indicates a location within the city of Helendale, but a Google-based search indicates the Facility is in an unincorporated area of San Bernardino County between the zip codes of 92342 (Helendale) and 92347 (Hinkley). Please clarify the appropriate address for the Facility.

Section 2.1.2, Surface Impoundments (Ponds A and B) liner soil foundation, indicates that the two surface impoundments were constructed to contain stormwater from a 1,000-year, 24-hour storm event over the entire facility drainage area. This is in conflict with the approved design plans, which indicate the surface impoundments are constructed to maintain the 100-year, 24-hour event drainage from the entire facility in addition to the 1,000-year, 24 hour event that falls directly on the surface impoundments. Please clarify the apparent discrepancy.

Section 2.1.8, CQA Monitoring, Testing and Documentation, indicates that a loss of two pounds per square inch (psi) was allowed when testing the seams. However, sections 4.2.4.7.1, Air Pressure Testing, and 4.2.4.7.2, Vacuum Box Testing, indicate that a loss of 3 psi was allowed without failure. Please clarify the apparent discrepancy.

Section 6.0, CQA Certification, indicates the "double liner system" installed at the Facility is constructed in compliance with the project designs and specifications; however, elsewhere in the Report and the Design Plan, the liner system is referred to as a "single composite liner." Furthermore, this certification only applies to the surface impoundments. The certification for the compost pad area is absent. Please clarify the apparent discrepancy and include a certification for the compost pad area.

Closing

As submitted, this document does not adequately satisfy the requirements of sections V.B. or V.D. of the Board Order. You must demonstrate that the Facility was constructed in accordance with the accepted final Water Board design plan and the Board Order. Please provide such a demonstration with detailed as-built drawings as well as a discussion for any deviations from the approved design plan.

You are reminded that the Final Construction Quality Assurance Report must be accepted by Water Board staff **prior to discharge**. Additionally, the financial assurance mechanisms in an amount adequate to cover the costs of closure and a reasonably foreseeable release from the Facility must be submitted to and accepted by the Water Board **at least 60 days prior to the discharge of waste** at the Facility. If you have any questions, please contact me at (760) 241-7404 (pcopeland@waterboards.ca.gov) or Brianna Bergen, Engineering Geologist, at (760) 241-7305 (bbergen@waterboards.ca.gov).

Sincerely,

Patrice J. Copeland, P.G.
Senior Engineering Geologist
Chief, S. Basin Land Disposal Unit

cc: Mailing List

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