California Regional Water Quality Control Board
North Coast Region

WASTE DISCHARGE REQUIREMENTS
ORDER NO. R1-2023-0010

for

COUNTY OF SONOMA

ANNAPOLIS SOLID WASTE DISPOSAL SITE
WDID No. 1B78064OSON
COUNTY OF SONOMA

Table of Contents

I. GENERAL

A. This Order rescinds and replaces Waste Discharge Requirements (WDRs) No. 96-44 for the County of Sonoma, Annapolis Solid Waste Disposal Site (Site), satisfies the regulatory renewal cycle for a Class III municipal landfill, and implements:

1. The Water Quality Control Plan for the North Coast Region (Basin Plan).
2. The minimum prescriptive standards (and, where deemed reasonable and appropriate, standards above and beyond those minimums) and performance goals of the California Code of Regulations, title 27, sections 20005-22278 (Non-Hazardous Solid Waste),[1] and of Resource Conservation and Recovery Act (RCRA) Subtitle D, 40 Code of Federal Regulations (CFR) Part 258 (Criteria for Municipal Solid Waste Landfills).
3. State Water Resources Control Board (State Water Board) Resolution No. 93-62, Policy for Regulation of Discharges of Municipal Solid Waste, adopted June 17, 1993.

B. Basis and Rationale for Requirements:

This Order serves as Waste Discharge Requirements (WDRs) for discharges to land issued pursuant to section 13263 of the California Water Code (Water Code). All monitoring and reporting requirements specified in the attached Monitoring and Reporting Program No. R1-2023-0010 are issued pursuant to Water Code section 13267.

The North Coast Regional Water Quality Control Board (Regional Water Board) developed the requirements in this Order based on information submitted subsequent to the 1996 Annapolis Landfill Final Closure and Post Closure Maintenance Plan/Joint Technical Document (JTD) for permit update, revision and renewal. Additional reports, plans, monitoring data, and other available information comprise updates to the JTD including:

1. Sonoma County Permit and Resource Management Department; Approval Notice of Categorical Exemption, SCDTPW Road Maintenance Soils Disposal Site- Annapolis Transfer/Closed Landfill Project, June 16, 2015
2. Final Post-Closure Maintenance Plan, Annapolis Landfill, Sonoma County, California, Geosyntec Consultants, May 27, 2020

[1] All subsequent references in this Order to title 27 refer to that title within the California Code of Regulations.

3. Soil Stockpile and Cap Maintenance Soil, Annapolis Landfill, Sonoma County Department of Transportation and Public Works, August 23, 2022
4. Fourth Quarter Water Monitoring Report, Annapolis Landfill, Sonoma County California, EBA, November 15, 2022
5. Fourth Quarter Landfill Gas Monitoring, Annapolis Landfill, Sonoma County, California, EBA, November 15, 2022
6. Monitoring and Reporting Program Assessment, Annapolis Landfill, Sonoma County, California, EBA, December 2022

C. Site Owner and Operator:

The County of Sonoma (County), hereinafter Discharger, owns, operates, and maintains the closed Annapolis Solid Waste Disposal Site (Site), a Class III Solid Waste Disposal Site (SWDS). The Site has one Waste Management Unit (WMU) which accepted waste between 1970 and 1995, with the first WDRs issued in 1978. Closure WDRs were issued in 1996 to provide for construction of the final landfill cap system, post closure monitoring and maintenance and financial assurances.

D. A copy of this Order shall be kept at the Annapolis SWDS for reference by operating personnel at all times. Key operating personnel shall be familiar with its contents.

II. FINDINGS

A. Classification

The Site as defined in Attachments “A” and “B” is a Class III landfill as defined in title 27, sections 20200- 20220.

B. Basin Plan

As required by Water Code section 13263(a), these WDRs are crafted to implement the Water Quality Control Plan for the North Coast Region (Basin Plan), and in so doing, the Regional Water Board has taken into consideration the beneficial uses to be protected, the water quality objectives (both numeric and narrative) reasonably required for that purpose, other (including previous) waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. The Basin Plan contains implementation plans and policies for protecting waters of the basin. The Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

The Basin Plan identifies beneficial uses for each hydrologic area in the Region, as well as for specific waterbodies and broad categories of waters. Protection will be afforded to the present and potential beneficial uses of waters of the North Coast Region as designated and presented in Table 2-1 of the Basin Plan. The beneficial uses of any specifically identified water body generally apply to all its tributaries. Thus, beneficial uses applicable to area groundwater within the Gualala River Hydrologic Area to be protected are as follows:

a. Municipal and domestic supply

b. Agricultural water supply

c. Industrial service supply

d. Industrial process supply

e. Industrial process supply

f. Groundwater recharge

Table 2-1 of the Basin Plan identifies the following existing and potential beneficial uses of surface waters in the Wheatfield Fork Hydrologic Subarea are as follows:

a. Municipal and domestic supply

b. Agricultural supply

c. Industrial service supply

d. Industrial process supply

e. Groundwater recharge

f. Navigation

g. Hydropower generation

h. Water contact recreation

i. Non-contact water recreation

j. Commercial and sport fishing

k. Warm freshwater habitat

l. Cold freshwater habitat

m. Wildlife habitat

n. Rare, threatened, or endangered species

o. Migration of aquatic organisms

p. Spawning, reproduction, and/or early development

C. Human Right to Water

It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (Wat. Code §106.3, subd. (a)). The Safe Drinking Water Act provides that all Californians have a right to pure and safe drinking water (Health & Saf. Code § 116270, subd. (a)). This Order promotes that policy by requiring the Discharger to handle and dispose of waste in a manner that will protect water quality objectives, including those that protect drinking water supplies.

D. Endangered Species Act

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A sections 1531 to 1544). The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

E. Site Description and History

1. The Site is located at 33551 Annapolis Road near the town of Annapolis in a rural area of Sonoma County, California, as shown on Attachments “A” and “B” and incorporated herein and made part of this Order. The Site comprises Sonoma County Assessor’s Parcel Number 123-030-004 on a single parcel. The property is located on an unnamed tributary to the Wheatfield Fork of the Gualala River as shown in Attachment B of this Order.
2. The total waste footprint landfilled at the Site includes 9 acres as shown on Attachment B.

3. The facility historically accepted non-hazardous, non-designated, and inert solid waste from commercial and private haulers. In accordance with the Solid Waste Facility Permit (SWFP) issued by Sonoma County Department of Health Services, Environmental Health Division (local enforcement agency, or LEA) and the California Department of Resources, Recycling and Recovery (Cal Recycle), the facility was historically permitted for a maximum waste disposal of 65 tons per day and considered a relatively small operation.
4. The Site ceased accepting waste in 1995, converted to transfer station operations and outhaul to the County's main landfill located in Petaluma and implemented final closure construction in 1996 under WDR Order No. 96-44. Current transfer station operations are open to the public four days per week and closed on major holidays.
5. Existing onsite support facilities include a Tipping/Transfer Facility, scale house, recycling facilities, wood and green waste diversion processing areas, leachate management and storage tank, pad and weather station, sedimentation pond, groundwater and landfill gas monitoring wells/probes and a soil stockpile operating pad with an inert material disposal area.
6. The Site comprises the "pre-1993 Subtitle D footprint," and is classified as an unlined "Existing Unit" by 40 CFR 258.1(d)(4) and 258.2, State Water Board Resolution 93-62, and title 27, section 20164. The Site is currently undergoing corrective action to control releases of leachate and landfill gas to receiving waters. Corrective actions implemented at the Site include ceasing landfill operations, capping and closing the waste management unit, improvements to the leachate collection program to reduce liquid levels along with passive venting of landfill gas through the landfill cap. Additional improvement have been made to the drainage conveyances to clean, clear, reconstruct and rock for prevention of ponding and infiltration in drainage ways. The 9-acre Site is certified construction closed.

F. Landfill Setting

1. The Site is located approximately five miles inland from the Sonoma Coast and Stewarts Point and approximately 3 miles south of the town of Annapolis northern Sonoma County. The Site is in the foothill region of the Coastal Mountain Range in heavily forested, rugged mountain terrain.
2. Surrounding land uses include rural residential and agricultural operations, primarily timber stands and developing vineyards. The closest residence is located about 0.5 miles north of the property.

3. Groundwater resources provide domestic and agricultural water supply for the surrounding area.

G. Wastes and their Classification

1. The Discharger proposes to accept “inert” materials under title 27, sections 20220 and 20230 respectively. These materials are generated from area slides on county roads and the proposed reuse is in maintaining the landfill grades for positive drainage.
2. Liquid waste generated onsite, such as landfill leachate, is transported via leachate tanker truck to the Santa Rosa Laguna Treatment Plant where it is comingled with municipal wastewater and treated prior to final disposal or beneficial reuse in accordance with the National Pollutant Discharge Elimination System (NPDES) permit for the Santa Rosa Regional Water Reuse System (Order No. R1-2020-0012). .

H. Landfill Siting Restrictions

1. Pursuant to 40 CFR Subtitle D and title 27, municipal solid waste landfills that accept solid waste after October 9, 1993, are subject to siting criteria and restrictions related to areas of rapid geologic change.
2. The JTD indicates that rapid geologic change should not affect the existing waste disposal areas because onsite mapping and observations have not indicated the presence of pre-existing landslides, significant shear zones, zones of weakness, or other structural factors that could significantly affect stability; and there are no known Holocene-active faults within 200 feet of the site.

I. Geology, Faulting and Seismicity, Hydrogeology

1. The geologic units within the property boundaries include the Cretaceous-Jurassic Franciscan Formation of interbedded marine sandstone, shales and conglomerate with a predominate steep dip and northwesterly strike. Locally the Franciscan is sheared, fractured, and folded unconformably beneath the Pliocene Ohlson Ranch Formation which forms a thin veneer on the area ridges.
2. Faulting and Seismicity
   (a) The Facility is located approximately 3 miles east of the San Andreas active fault zone.
   (b) The maximum credible earthquake (MCE) for the site is calculated from the San Andreas Fault Zone, occurs

approximately 3 miles from the site and is characterized by a moment magnitude 8.05 event generating a peak ground acceleration of approximately 0.58g. The previous slope stability analysis for the final cover under seismic conditions indicates the site as stable, though some slippage of the cover materials could occur.

(c) There are no known Holocene-active faults within 200 feet of the property boundary.

3. Groundwater Hydrology and Depth to Groundwater

(a) Groundwater conditions within the vicinity of the landfill are discontinuous and variable, controlled by joints, fractures and shear zones within the Franciscan Formation. Shallow groundwater water occurs within the contact zone of the Ohlson Ranch Formation and underlying Franciscan Formation and ranges between 20 to 30 feet seasonally.

(b) The Ohlson Ranch Formation forms a thin contact of poorly consolidated marine sandstone, siltstones and conglomerates and unconformably overlies the Franciscan Formation.

(c) The Franciscan Formation is the base rock water-bearing unit at the site consisting of interbedded and fractured marine sandstones, shales and conglomerates. Site monitoring wells indicate groundwater occurs in this formation at depths ranging to about 30 feet below the ground surface. Many Franciscan Formation monitoring wells are low yield. The natural groundwater gradient direction in the Franciscan Formation has a westerly trend following the surrounding topography and is likely controlled by fractures to some degree.

J. Surface Waters, Wetlands, Floodplains

1. The Site is located on an upland area above an unnamed tributary of the Wheatfield Fork of the Gualala River Hydrologic Area of the Mendocino Coast Hydrologic Unit

2. The Basin Plan generally prohibits new point source discharges of waste to coastal streams and natural drainageways that flow directly to the ocean and requires that existing discharges to these waters be eliminated at the earliest practicable date. Specific types of surface water discharges, such as discharges of stormwater, may be permitted under general NPDES permits. These WDRs do not cover such discharges; the Discharger is

responsible for securing and/or enrolling for coverage under the requirements of applicable general NPDES permits for any proposed discharges of water from the facility into surface waters.

3. The Site is not located within a wetland or the 100-year floodplain zone.

K. Precipitation and Stormwater

1. The Site receives an average of 40.9 inches of rainfall per year. About 95 percent of the storm events occur between the months of November and April and the 100-year, 24-hour precipitation event for the property is 6.64 inches.

2. This Order does not replace or supersede the Statewide General NPDES Permit for Stormwater Discharges Associated with Industrial Activities (Industrial General Permit) or the Statewide General NPDES Permit for Discharges of Stormwater Associated with Construction Activities (Construction General Permit). The Discharger must ensure and certify that existing operations and proposed new construction and activities are comply with relevant stormwater general permits. Both permits require the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) to address a facility's or project's pollutants of concern and identify Best Management Practices (BMPs) to reduce those pollutants in stormwater.

4. Stormwater run-on and runoff from the facility is controlled in a series of perimeter ditches, storm drains, down chutes, and a sedimentation pond located at the base of Site. The conveyances route stormwater to sedimentation basins. The sedimentation basin retains runoff, provides for evaporation, and allow suspended solids to settle before discharge to the unnamed tributaries that flows to the unnamed tributary of the Wheatfield Fork of the Gualala River.

5. The Order requires that the onsite surface water drainage system and sedimentation basin are adequately sized to accommodate peak flows and volumes associated with the 100-year, 24-hour storm. This Order further requires that the Discharger report annually on the adequacy of onsite drainage collection, conveyance, treatment, and storage features.

L. Corrective Actions

1. The Discharger has conducted groundwater investigations for leak detection, detection monitoring, and corrective action monitoring under the WDR Order No. 96-44 and in accordance with title 27. Results of groundwater investigations and monitoring initiated in the 1990's confirm groundwater contamination in proximity to and downgradient of the landfill perimeter. The source of the groundwater impact has been attributed to both landfill gas and leachate sources. Primary pollutants of concern have included volatile organic compounds and general water quality parameters that exceed background conditions. In accordance with Order No. 96-44 groundwater, leachate and landfill gas are sampled and reported on a quarterly basis. Since construction of the landfill cap and installation of leachate collection engineering controls, the landfill gas methane impacts have largely resolved. Current groundwater reports indicate remaining groundwater impacts with general water quality parameter exceedances at or below water quality objectives.
2. The Monitoring and Reporting Program, attached to this Order, requires that the Discharger provide an Annual Report which summarizes and confirms the performance and effectiveness of the corrective action efforts as post closure care proceeds. Recent groundwater monitoring reports show decreasing levels of constituents of concern, primarily that volatile organic compounds associate with landfill gas have greatly resolved, and the corrective actions undertaken by the County have been effective in mitigating and reducing water quality impacts.
3. Monitoring required under this Order will include continued sampling and assessment from corrective action monitoring points used to measure and document contaminant concentrations associated with releases at the Site. An updated corrective action plan consistent with title 27 is required within the Annual Report.

M. Waste Management Unit Design

1. The Site footprint is unlined, and it is exempt from current State and Federal containment criteria. However, because there has been a release from the WMU, the WMU must comply with title 27 requirements for monitoring and corrective action.

N. Monitoring

1. Groundwater, surface water, and unsaturated zone monitoring must comply with the requirements of title 27, sections 20380-20435. The Discharger is presently monitoring existing units at the facility under MRP No. 96-44. This Order provides an updated MRP to address the results of recent groundwater and leachate monitoring.
2. Attachment B shows surface, groundwater, and landfill gas and lysimeter monitoring locations.

O. Closure

1. Since Sonoma County Annapolis SWDS was not closed prior to the federal deadline (October 9, 1991), the closure requirements of Subtitle D apply.
2. Title 27 provides a minimum landfill cap closure specification for earthen caps requiring 24 inches of compacted foundation layer soils, overlain by 12 inches of compacted clay liner, overlain by 12 inches of vegetative cover soils. Engineered alternative liner systems are allowed provided they demonstrate an equivalent level of water quality protection.

   Upon reaching its final designed contour elevations the approximate 9-acre Site waste footprint was construction closed in accordance with WDR Order No. 96-44 and the Dischargers approved Final Closure and Post-Closure Maintenance Plans. The as built landfill cap consists of 24 inches of compacted foundation layer soils, a low permeability geosynthetic clay liner/geomembrane (GCL engineered alternative liner) and 12-inch minimum vegetative soil layer.
3. Perimeter slopes were constructed at 3:1 or less angle with 15-foot-wide benches every 50 vertical feet or less. The drainage channels were constructed and required to be maintained at a minimum 3 percent slope.
5. The slope stability analyses for the final closed landfill configuration provided a demonstration indicating acceptable factors of safety and displacement under seismic loadings and saturated conditions.

P. Financial Assurances

1. Title 27, sections 20950(f) and 20380(b) require that the Discharger establish a formal financial mechanism to fund Site closure, post-closure maintenance, and remediation of the known or reasonably foreseeable release (corrective action) from the facility. Site construction closure was completed in 1996 and remaining financial assurance requirements are for post closure maintenance and corrective action.

2. The Sonoma County Board of Supervisors, in Resolution No. 05-052 approved a Pledge of Revenue for Post Closure Maintenance and Corrective Action on April 12, 2005. As of April 2022, the Discharger provided an updated cost estimate for post closure maintenance of $3,383485 and an updated cost estimate for corrective action of $930,749 as adjusted by the CalRecycle published 2021 inflation factors.

   The Discharger is required to update approved cost estimates annually to account for inflation and to recalculate the closure costs every five years using current costs (typically concurrent with the LEA/CalRecycle 5-year Solid Waste Facilities Permit review). In accordance with title 27, section 21820, subdivision (a), cost estimates shall be based on the cost of hiring a third party to close the landfill in accordance with the submitted closure plan.

3. The Discharger must review the known and foreseeable release scenario and cost estimate annually, update as appropriate, and so document in the annual monitoring report.

Q. Inert Spoils Management and Reuse Materials

1. The Discharger provided plans for onsite management of landslide spoils and slide debris generated periodically from the County of Sonoma Road Maintenance Department. Operations include stockpiling/storage, containing/maintenance, grading and stabilizing clean inert spoils within a designated area of the Site for re-use in future projects.

2. A spoils operations and management area is engineered and constructed with a design capacity for ~ 612 cubic yards of wet material and ~ 2500 cubic yards of dry materials as described in the Final Post Closure Maintenance Plan by Geosyntec, May 2020, and as located on Attachment B. The area has been designed for

both wet and dry spoils stockpile materials management (Attachment C).

3. The Operations Plan for the green waste materials and unsuitable fill provides for sorting, removal and processing at the adjacent transfer station. Onsite temporary storage of sorted green waste is designed for a maximum of 50 cubic yards.

4. The former Site borrow pit will receive sorted, clean, suitable materials, graded into place and available for re-use in landfill post-closure maintenance needs. The borrow area capacity for the stockpile volume is approximately 28,000 cubic yards within the 1.9 acre borrow pit (Attachment D).

R. Antidegradation Policy

1. State Water Board Resolution No. 68-16, “Statement of Policy with Respect to Maintenance of High-Quality Waters in California”, (Antidegradation Policy) requires that whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality must be maintained. Any change in the existing high quality is allowed by that policy only if it has been demonstrated to the Regional Water Board that any change will be consistent with maximum benefit to the people of the State and will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies. The policy further requires that dischargers meet WDRs that will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained.

2. The Board interprets “high quality waters” as the best water quality that has existed since the Antidegradation Policy was adopted in 1968 after considering any subsequently authorized degradation that has been allowed in compliance with the Policy. As the County has continued to investigate and implement corrective action measures for releases at the Site they have demonstrated reduced impacts associated with those releases. Actions thus far include ceasing landfill operations, capping and construction closure of the waste management unit in accordance with title 27, active leachate collection, management and removal, passive landfill gas management, and maintaining positive

drainage off the cap thereby reducing the potential for leachate generation. The County's chosen design implements current State and Federal standards intended to protect human health and the environment and to protect against water quality impairment. The Regional Water Board has required containment measures at or above the minimum prescriptive standards contained in those regulations.

3. The Discharger is implementing additional operational controls to minimize and manage leachate production especially during periods of peak rainfall.

4. This Order is consistent with the maximum benefit to people of the State because: (i) it provides for continued maintenance, monitoring and improvements of a closed solid waste management unit; and (ii) it requires ongoing assessments and implementation of updated groundwater corrective action plans to ensure protection of groundwater and surface water beneficial uses, and (iii) it requires financial assurances to ensure that funds area available to meet State requirements (title 27 and Water Code) and is protective of groundwater.

5. Collectively, implementation of these requirements constitutes the best practicable treatment and control of the discharge in accordance with the Antidegradation Policy. The permitted discharge is consistent with the Antidegradation Policy.

S. CEQA and Other Considerations

1. A Negative Declaration for the final closure project was approved by the Sonoma County Board of Supervisors on April 19, 1994, and the project was completed in 1996. Following final closure of the Site the County of Sonoma submitted a Notice of Categorical Exemption for the disposal of road maintenance soils at the Site as a minor change to the operation of a publicly owned facility involving no expansion of use. The Categorical Exemption was approved on June 15, 2016.

2. The Regional Water Board considered the collective CEQA documentation for the facility including the categorical exemption approved by the County and has determined that the project as proposed will not result in a potentially significant effect on the environment.

T. Procedural Requirements

1. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution and to protect public health have approved the use of this facility for the discharges of waste to land stated herein.
2. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
3. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this facility and discharge.
4. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions will be provided upon request or may be found on the California Waterboards Water Quality Petitions webpage: (https://www.waterboards.ca.gov/public_notices/petitions/water_quality)

U. AB 2108 Requirements

The Regional Water Board publicly noticed the Order and provided opportunities for public comment. Public notice was provided to interested persons and public agencies in the region with jurisdiction over natural resources in the affected area, including the Sonoma County Health Department. The Regional Water Board conducted outreach in potentially affected disadvantaged and tribal communities. The discharge regulated by this Order is not expected to result in a disproportionate impact to disadvantaged or tribal communities. This Order does not include a time schedule in accordance with section 13263, subdivision (c) of the Water Code for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance (Water Code § 13149.2, subd. (d)). The Regional Water Board

has satisfied the outreach requirements set forth in Water Code section 189.7.

THEREFORE, IT IS HEREBY ORDERED that WDRs Order No. 96-44 is rescinded, and that the Discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

III. PROHIBITIONS

A. The discharge of any waste not specifically regulated by this Order is prohibited.

B. The discharge of waste including solids, liquids, leachate, or landfill gas to surface water, surface water drainage systems or groundwater is prohibited. Water may be discharged in amounts reasonably necessary for dust control, compaction, fire control, and the establishment and maintenance of vegetation.

C. Disposal of waste to areas outside of the constructed and capped waste footprint boundary as certified and approved by the Executive Officer, is prohibited.

D. The discharge of "hazardous waste" and "designated waste" at this facility is prohibited. The discharge of leachate from the landfill units and LCRSs to receiving waters is prohibited. For the purposes of this Order, the terms "hazardous waste" and "designated waste" are as defined in title 27..

E. The discharge of waste to ponded water from any source is prohibited. Ponding of liquids, including rainfall runoff and leachate, over solid waste disposal cells is prohibited.

F. The discharge of waste to surface waters or within 50 feet of surface waters is prohibited.

G. The discharge of landfill wastes, including impacted groundwater, to a stormwater sedimentation basin, is prohibited.

H. The discharge of wastes from activities occurring upon or within the landfill footprint to stormwater sedimentation basins, surface, and/or ground water is prohibited.

I. The discharge of any waste in any manner not specifically described or quantified in the findings and regulated by this Order is prohibited.

J. Creation of a pollution, contamination, or nuisance, as defined by Water Code section 13050, is prohibited.

K. The Discharger shall not cause the concentration of any Constituent of Concern to exceed its respective concentration limit in any monitoring medium. The concentration limit for each monitoring parameter will be set at the background concentration. Data analysis will be performed in accordance with the MRP.

IV. SPECIFICATIONS

A. General Specifications

1. The discharge of wastes shall not cause water quality degradation by allowing a statistically or non-statistically significant increase over background or baseline concentrations as determined in accordance with the MRP.
2. When conducting post closure maintenance and repairs, wastes shall only be discharged into, and shall be confined to, the landfill units specifically designed for their containment.
3. Leachate collection and removal systems shall be operated so as to minimize the buildup of leachate in the WMU and to ensure that wastes in the landfill are not saturated.
4. Any leachate generated and collected at the Site shall be handled and disposed of to a legal place of disposal.

B. Construction Specifications

1. All ongoing and future phases of maintenance and construction shall be in accordance with the applicable provisions of Title 27 and this Order and approved by the Executive Officer prior to operation.
2. WMU containment structures shall be designed and constructed under the direct supervision of a California registered civil engineer, or a certified engineering geologist, and shall be certified by that individual as having been constructed in accordance with Regional Water Board approved plans and specifications. Designs shall include a CQA Plan, the purpose of which is to:
   (a) Demonstrate that the WMU has been constructed according to the specifications and plans approved by the Regional Water Board.
   (b) Provide quality control on the material and construction practices used to construct the WMU and prevent the use of inferior products and/or materials which do not meet the approved design plans and specifications.

(c) A final construction CQA report shall be submitted for approval by the Executive Officer after each phase of construction and prior to the discharge of waste into the constructed phase.

(d) A final construction CQA report shall include, but not be limited to, as-built plans for the WMU, a CQA report with a written summary of the CQA program and all test results, analyses, and copies of the inspector's original field notes, and a certification as described in the Landfill Specifications, below.

3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged waste over the post closure maintenance period of the WMU.

4. Any post closure reconstruction shall meet the minimum specifications as follows:

(a) Compacted clay layers in landfill caps shall have a maximum hydraulic conductivity of 1 x 10-6 cm/sec or be equal to the hydraulic conductivity of the bottom liner system or underlying geologic material, whichever is less permeable, and a minimum relative compaction of 90 percent.

(b) Hydraulic conductivities of liner materials shall be measured by laboratory tests using solutions with similar properties as the fluids that will be contained. Hydraulic conductivities of cap materials shall be measured by laboratory tests using water. Hydraulic conductivities measured through laboratory methods shall be confirmed by field-testing in accordance with this Order and MRP.

(c) Construction methods and quality assurance procedures shall be sufficient to ensure that all parts of the cap meet the hydraulic conductivity and compaction requirements.

5. Leachate collection systems shall be fully inspected annually, and integrity tested as needed in accordance with the applicable provisions of title 27. Inspection reports or testing results shall be submitted by February 15, annually and include a complete report of findings, including a statement as to the presence or absence of leachate.

C. Post Closure Specifications

1. All post closure maintenance and repairs to containment structures and erosion and drainage control systems shall be designed and constructed under the direct supervision of a California registered professional civil engineer, or a certified engineering geologist, and shall be certified by that individual as meeting the prescriptive standards and performance goals of title 27. Designs shall include a Construction Quality Assurance Plan, the

purpose of which is to demonstrate that the structures have been constructed according to the approved specifications and plans and provide quality control on the material and construction practices used to construct the structures and to prevent the use of inferior products and/or materials that do not meet the approved design plans and specifications at closure, each landfill shall receive a final cover in accordance with the State and Federal prescriptive standards, or an approved Engineered Alternative Design.

2. Materials used for final cover construction repair shall have appropriate physical and chemical properties to ensure containment of wastes over the post- closure maintenance period. CQA information and as- built drawings shall be submitted to the Regional Water Board within 60 days of the completion of any phase of final cover construction or repair.
3. Construction methods and quality assurance procedures shall be sufficient to ensure that all parts of the final cover meet the permeability and stability requirements specified in 40 CFR section 258.60 and title 27.
4. Vegetation shall be maintained over closed landfill areas. Vegetation shall be selected to require a minimum of irrigation and maintenance and shall have a rooting depth not in excess of the vegetative layer thickness. Vegetation shall be maintained to allow for inspection of the cap and its integrity, including erosions concerns, wildlife damage, etc.
5. Closed landfill units shall be maintained with at least a three percent (3%) grade and maintained to prevent ponding and infiltration.
6. The final WMU slopes shall not exceed a horizontal-to-vertical ratio of 3:1, without benching, to ensure slope stability. All areas subject to erosion by wind or water shall be designed and constructed to prevent such erosion.

D. Inert Spoils Management and Reuse Materials

1. The Discharger shall provide plans for onsite management of landslide spoils and slide debris generated periodically from the County of Sonoma Road Maintenance Department. Operations include stockpiling, storage, containing, maintenance, grading, and stabilizing clean inert spoils within a designated area of the Site for re-use in future projects.

2. A spoils operations and management area is engineered and constructed with a design capacity for ~612 cubic yards of wet material and ~2500 cubic yards of dry materials as described in the Final Post Closure Maintenance Plan by Geosyntec, May 2020. The area shall be designed for both wet and dry spoils stockpile materials management.

3. Green waste materials and unsuitable fill are required to be sorted, removed, and processed at the adjacent transfer station. Onsite temporary storage of sorted green waste shall not exceed 50 cubic yards.

4. Former Site borrow pit will receive screened clean, suitable materials, graded into place, and available for re-use in landfill post-closure maintenance needs. The borrow area capacity for the stockpile volume is approximately 28,000 cubic yards within the 1.9 acre borrow pit.

E. Protection from Storm Events

1. Closed WMUs shall be designed, constructed, and operated to prevent inundation or washout due to floods with a 100-year return period. Class III landfill units and related containment structures shall be constructed and maintained to prevent, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping under 100-year, 24- hour precipitation conditions.

2. Precipitation and drainage control systems shall be maintained on the closed WMUs. They shall be designed and constructed to accommodate the anticipated volume of precipitation and peak flows from surface runoff under 100-year, 24-hour precipitation conditions.

3. By August 15, annually, the Discharger shall submit to the Executive Officer a Winterization Plan describing measures planned to prepare the site and conduct operations during the wet season.

4. Prior to the anticipated rainy season, but no later than October 1, annually, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the facility and to prevent surface drainage from contacting or percolating through wastes. By December 15, annually, the Discharger shall submit a report to the Executive Officer describing measures taken to comply with this specification.

5. Surface drainage shall be designed to minimize infiltration and shall not be allowed to contact wastes. Internal drainage conveyances shall be located to the maximum extent practicable, such that they do not cross over landfill areas. Drainage over landfill areas shall be contained in engineered conveyance structures or in drainage ditches which are lined with at least one foot of compacted soil having an in-place permeability of 1 x 10-6 cm/sec or less or an engineered alternative that provides equivalent or better protection from storm-water infiltration.

V. PROVISIONS

A. The Discharger shall comply with these WDRs and the attached MRP. A violation of the MRP is a violation of these WDRs. The Discharger shall further comply with all applicable provisions of title 27 and 40 CFR Part 258, Subtitle D not specifically referred to in this Order.

B. Prior to any maintenance repair construction, the Discharger shall obtain all permits required under Federal, State, or local laws

C. The Discharger shall continue to monitor the waste footprint and all underlying media per the MRP throughout the post-closure maintenance period and shall continue until the Regional Water Board determines that the wastes remaining at the site no longer threaten water quality.

D. The Discharger shall continue corrective action measures described in the MRP and shall maintain overall leachate and landfill gas monitoring.

E. The Discharger shall have the continuing responsibility to assure protection of waters of the State from discharged wastes, including leachate, that may be generated and discharged during post-closure maintenance periods of the facility and during subsequent use of the property for other purposes.

F. The Discharger shall provide proof to the Regional Water Board that the deed to the landfill facility property, or some other instrument that is normally examined during title search, has been modified to include, in perpetuity, a notation to any potential purchaser of the property stating that the parcel has been used as a municipal solid waste landfill, and that land use options for the parcel are restricted in accordance with the post- closure land uses set forth in the post-closure plan and in WDRs for the landfill. The document can be provided within the Annual Report.

G. In the event that the Discharger defaults on carrying out either the post-closure maintenance plan or any corrective action needed to address a release, then the responsibility for carrying out such work falls to the property owner.

H. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with the MRP, as required by Water Code sections 13750 through 13755.

I. The Discharger shall provide a copy of this Order to all contractors and all subcontractors conducting work and require that a copy of the Order remain in their possession at the work site. The Discharger shall be responsible for work conducted by its contractors or subcontractors.

J. The Discharger shall obtain and maintain adequate assurances of financial responsibility for initiating and completing corrective action for all known and reasonably foreseeable releases from a WMU at the facility in accordance with title 27, sections 20380, subdivision (b) and 22222. The Discharger shall provide an updated corrective action cost estimate to the Regional Water Board for review by February 15, 2024, and every five years thereafter, for the term of this permit.

K. In the event the Regional Water Board determines that the Discharger has failed or is failing to perform corrective action as required by law, the Regional Water Board may request that CalRecycle direct the Discharger to pay from the financial assurance revenues such amounts as necessary to insure sufficient corrective action. The Discharger shall be obligated to use such funds for corrective action in accordance with the directive of the Regional Water Board.

L. In accordance with title 27, the Discharger shall further provide and maintain adequate financial assurances to cover the costs of closure and post-closure maintenance for each WMU and shall report to the Regional Water Board staff by February 15, annually, that it has demonstrated financial responsibility to CalRecycle.

M. The post closure cost estimates shall be updated every 5 years or during each 5-year Solid Waste Facility Permit review and copied to the Regional Board staff.

N. During times of post closure maintenance or any periods of repair to the waste containment, drainage, or monitoring facilities, legible copies of the daily CQA field notes and summary reports shall be submitted to the Regional Water Board at: NorthCoast@waterboards.ca.gov by noon the following weekday. The facsimile or email shall be addressed to the Regional Water Board, Land Disposal Unit.

O. By February 15, 2024, and at least every five years thereafter, the Discharger shall produce and submit to the Regional Water Board an iso-settlement map accurately depicting the estimated total change in elevation of the final cover's low-hydraulic-conductivity layer. The map shall show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map

submitted in the final Closure Report and shall indicate all areas where visually noticeable differential settlement may have been obscured by grading operations. The map shall be drawn to the same scale and contour interval as the topographic map in the Closure Report, but showing the current topography of the final cover, and featuring overprinted isopleths indicating the total settlement to date. Land surveying to a one-foot contour interval rather than aerial surveying may be substituted to produce the iso-settlement map.

P. Annually when ponding is most likely to be present, the Discharger shall inspect and note any areas of differential settlement that warrant future observation and/or repair. After repairs are made during drier weather, the Discharger shall survey the revised surface of the repair. The Discharger shall outline the repaired areas on the initial as-built drawings or last iso settlement survey map and show the updated contours. Approximate locations of areas that have been identified for future observation shall also be noted. If no areas of settling are found, state so in the report. This information shall be included in the Annual Monitoring Report as well as each five-year iteration of the iso-settlement map. Such notation and delineation shall be made by, or under the supervision of, a California registered professional civil engineer or California registered professional civil engineer or registered geologist.

Q. All activities covered by this Order must comply with local, State, and Federal law. Prior to any construction, the Discharger shall obtain any and all permits required under federal, state, or local laws.

R. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under applicable State law.

S. Deliverable Reports, Plans, and Technical Information:

1. Update Corrective Action Assessment and Report:

   (a) the updated Corrective Action Plan and Assessment shall review the status of existing groundwater conditions, all existing environmental monitoring locations, monitoring wells, lysimeters, landfill gas probes, and provide for any needed replacement monitoring wells and /or a workplan for the proper abandonment of any damaged monitoring stations, wells. The submittal shall provide for any additional measures and engineering controls needed to address groundwater impacts at the Site.

   (b) Due July 15, 2023

2. Financial Assurance Assessment and Update:

(a) Due annually by February 15.

(b) Five-year update due by February 15, 2028, and every 5 years thereafter.

3. Spill Contingency Plan Updates.

(a) Due annually, by February 15, as needed. If no changes are needed the Discharger may advise Regional Water Board staff rather than providing a new copy of the unchanged plan.

4. Winterization Plan.

(a) The winterization plan shall describe measures to prepare the facility and/or other active areas on the property (including the stockpile management pad) for operations during the wet season.

(b) Due annually by August 15.

5. Confirmation of Implementation of Winterization Plan.

(a) This information shall confirm that measures described in the winterization plan have been installed/implemented as proposed, and are adequate for stabilizing the site, including the stockpile management areas and borrow pit.

(b) Due annually by December 15.

6. Leachate Collection System Report.

(a) Leachate tank farm and collection system shall be fully inspected annually, and evaluated for integrity, as needed. Inspection reports or testing results shall be submitted annually and include a complete report of findings and provisions for completion of all necessary maintenance and/or repairs.

(b) Due annually by February 15.

T. Operation and Maintenance

The Discharger must maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the WDRs.

U. Change in Discharge

The Discharger must promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.

V. Accidental Spills, Incident Reporting and Monitoring

1. The Discharger shall provide and comply with its Emergency Response Plan for any accidental spill or incident pursuant to title 27, section 21132. The Discharger shall immediately report the incident of unintentional or accidental spills and diligently act to abate the effects of the discharge. Written confirmation of the incident is required within two weeks of the discharge. Emergency Response Plans shall be reviewed, updated, and submitted to the Regional Water Board by February 15, 2024, and every five years thereafter.

W. Inspections.

1. The Discharger shall permit authorized staff of the State Water Resources Control Board and Regional Water Board entry upon premises in which an effluent or waste source is located or in which any required records are kept.
2. The Discharger shall permit authorized staff of the State Water Resources Control Board and the Regional Water Board entry upon premises in which an effluent or waste source is located or in which any required records are kept.
3. The Discharger shall permit authorized staff of the State Water Resources Control Board and the Regional Water Board access to copy any records required to be kept under terms and conditions of this Order.
4. The Discharger shall permit authorized staff of the State Water Resources Control Board and the Regional Water Board inspection of monitoring equipment or records.
5. The Discharger shall permit authorized staff of the State Water Resources Control Board and the Regional Water Board to sample any discharge.

X. Noncompliance

In the event the discharger is unable to comply with any of the conditions of this Order due to (a) breakdown of waste management equipment; (b) accidents caused by human error or negligence; and/or (c) other causes such as acts of nature, during work day business hours the Discharger must notify the Executive Officer by telephone within 2 hours of discovery of the incident (and by the following work day morning if after work day business hours) and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

Y. Change in Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the Discharger must notify the succeeding owner or operator of the existence of this Order and the status of the Discharger's annual fee account by letter, a copy of which must be forwarded to the Regional Water Board:

Z. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Dischargers from liability under Federal, State, or local laws, nor create a vested right for the Discharger to continue the waste discharge.

AA. Revision of Requirements

The Regional Water Board will review this Order periodically and may revise its requirements when necessary.

BB. Annual Fees

Authorization under this Order is conditioned upon payment of annual fees as required and when due, pursuant to Water Code section 13260.

CERTIFICATION

I, Valerie Quinto, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on June X, 2023.

_____

Valerie Quinto
Executive Officer

23_0010_Annapolis SWDS_WDR

LIST OF ATTACHMENTS

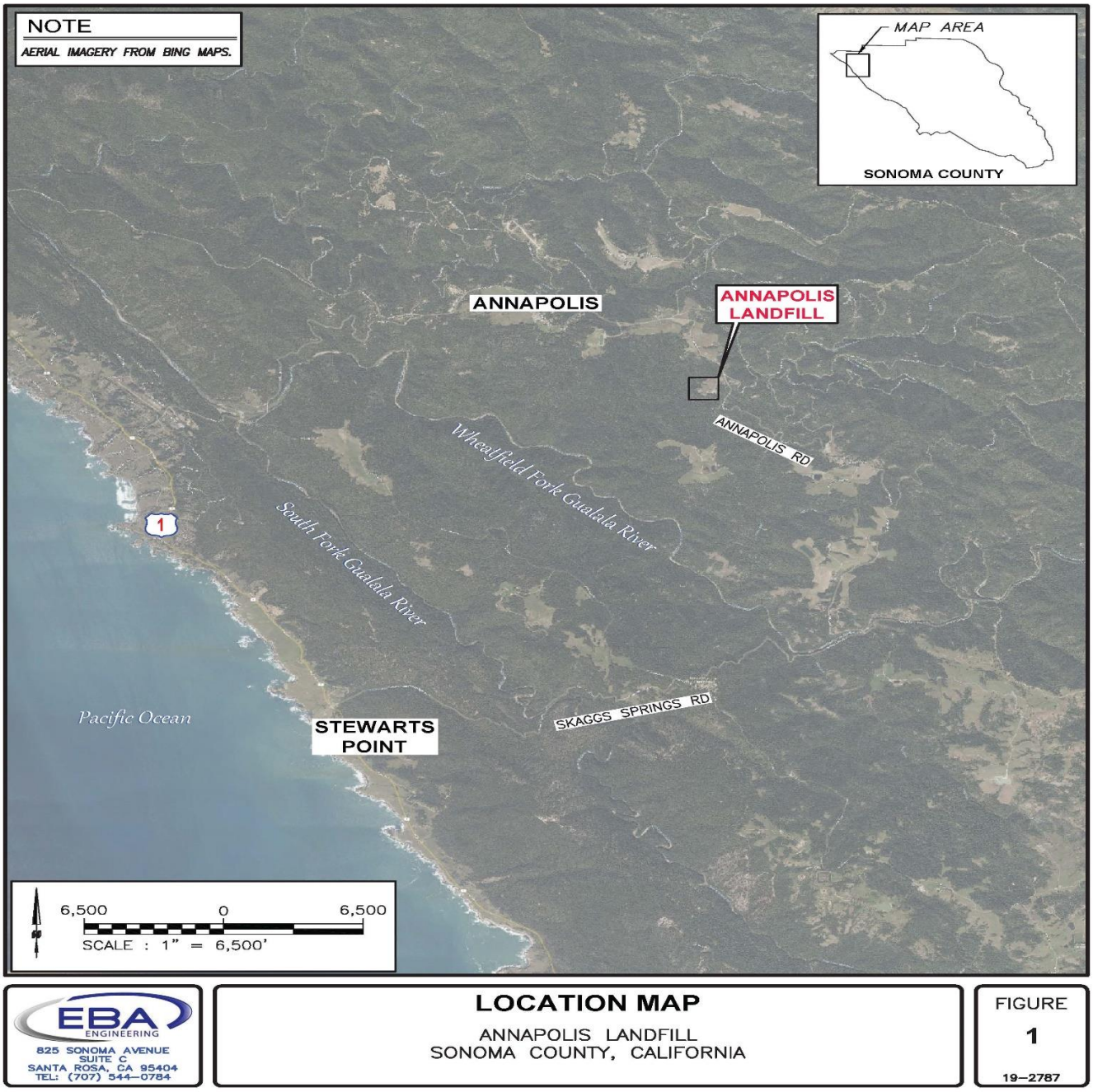
ATTACHMENT A DISPOSAL SITE VICINITY MAP

ATTACHMENT B SITE PLAN

ATTACHMENT C INERT SOIL STORAGE AREA

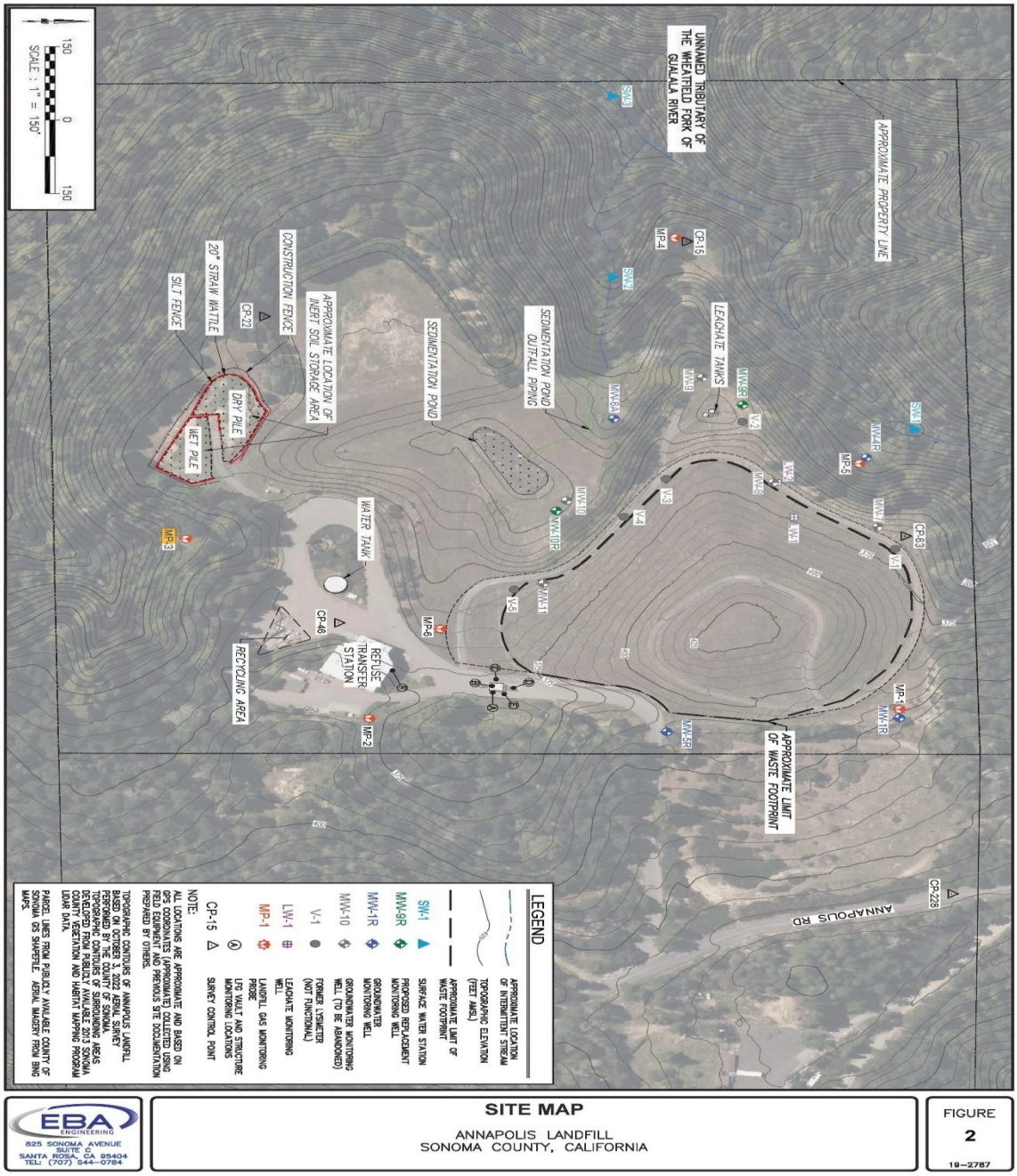
ATTACHMENT D OVERALL FILL PLAN

Attachment A



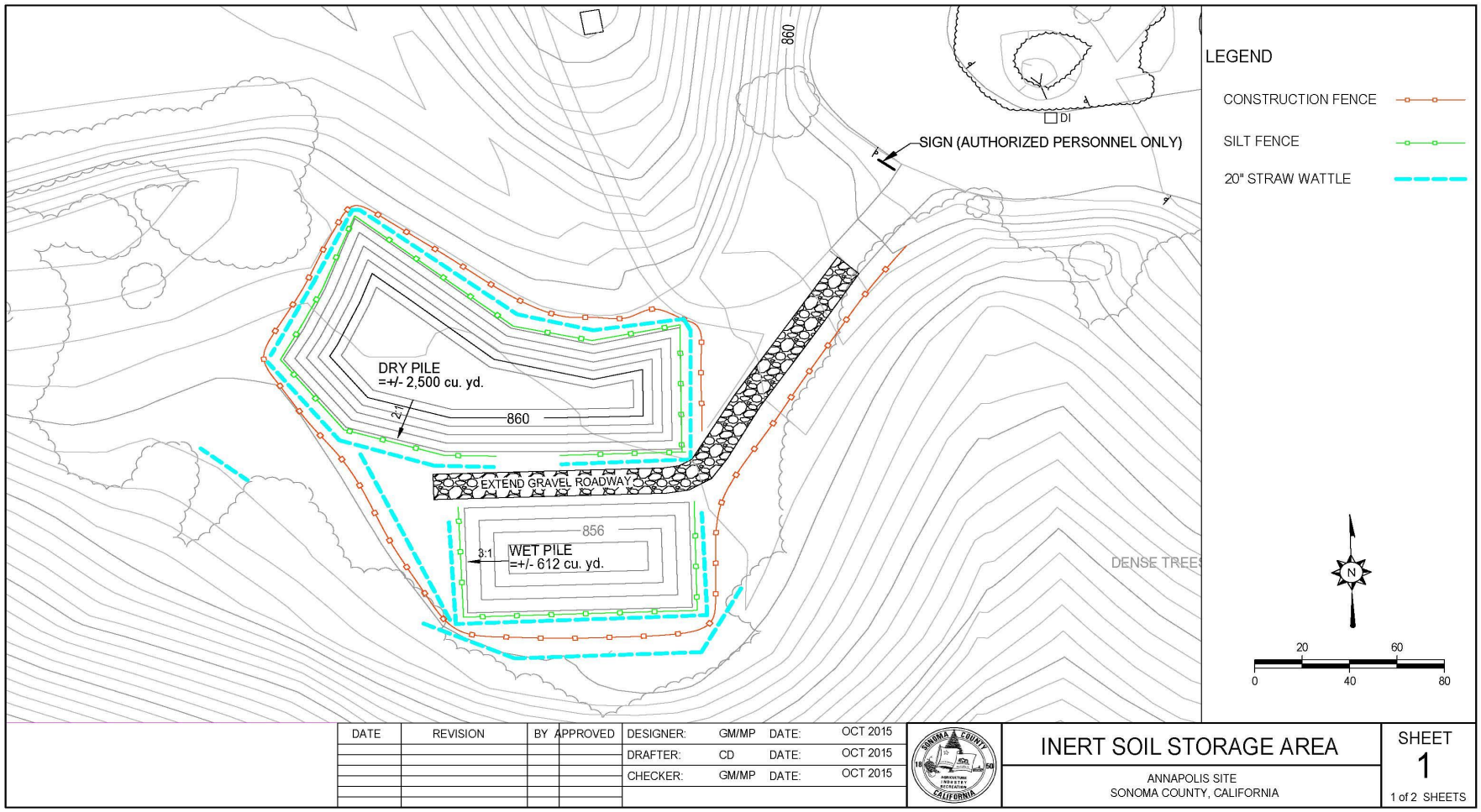
ATTACHMENT A DISPOSAL SITE VICINITY MAP

ATTACHMENT B

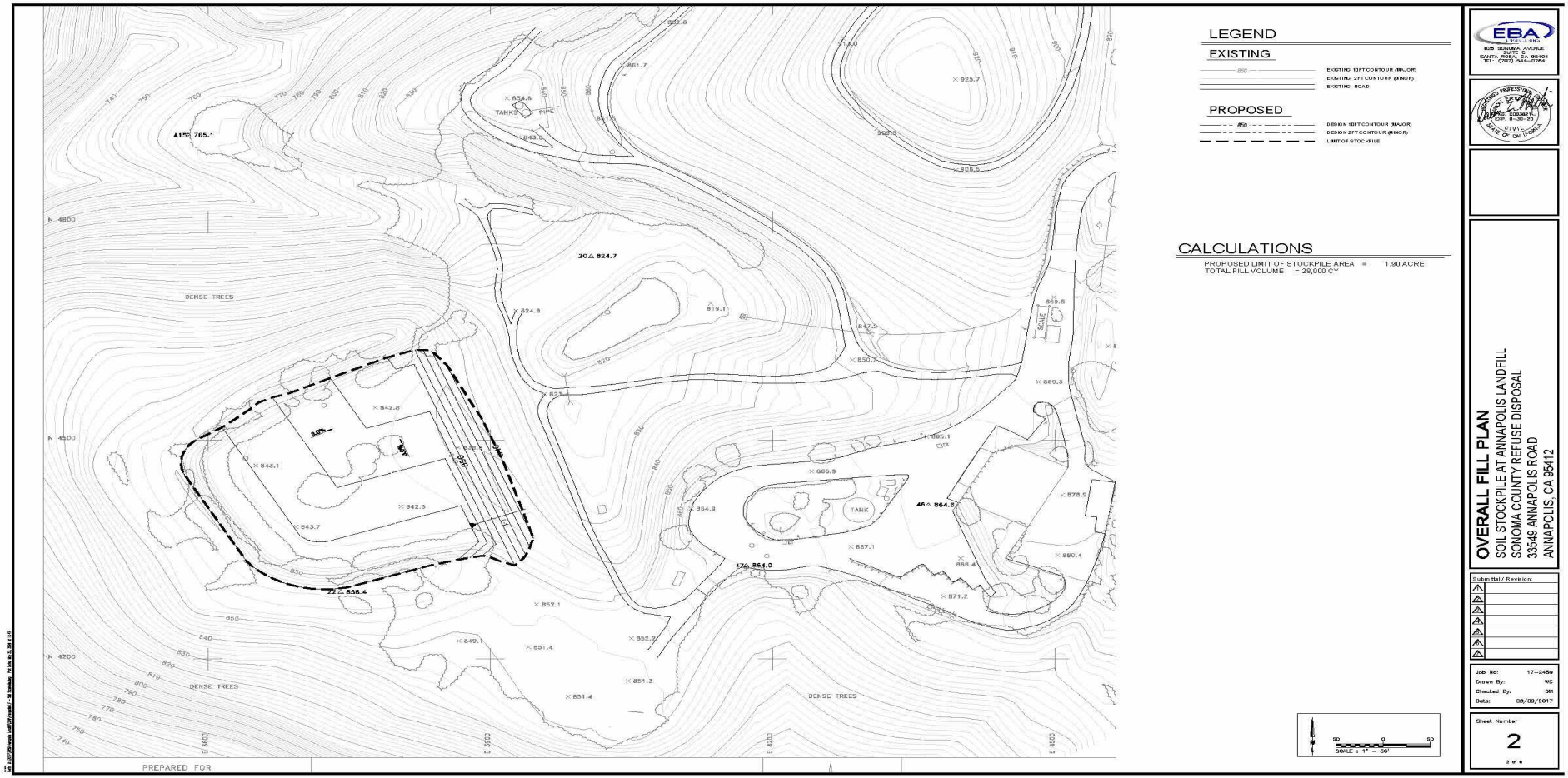


ATTACHMENT B SITE PLAN

ATTACHMENT C



ATTACHMENT C INERT SOIL STORAGE AREA



ATTACHMENT D OVERALL FILL PLAN