



Central Valley Regional Water Quality Control Board

14 March 2024

Oswaldo Cordero, Environmental Manager
Forward Landfill
9999 South Austin Road
Manteca, CA 95336

REVISED NOTICE OF APPLICABILITY WATER QUALITY ORDER 2020-0012-DWQ; FORWARD RESOURCE RECOVERY FACILITY; SAN JOAQUIN COUNTY

Central Valley Water Board staff is issuing a revised version of the 14 February 2024 *Notice of Applicability Water Quality Order 2020-0012-DWQ General Waste Discharge Requirements for Composting Operations at Forward Resource Recovery Facility*. This revised NOA amends the treat to water quality and complexity rating (TTWQ and CPLX) of 1A to 3B. The associated filing fee for the 2023-2024 fee schedule is \$8,431 for TTWQ and CPLX 3B. The Discharger shall submit the required annual fee (as specified in the annual billing issued by the State Water Resources Control Board) until the Notice of Applicability is officially terminated.

To fully comply with this NOA, please review the contents of the enclosed attachments and all the requirements of the General Order.

***Original Digitally Signed by John J. Baum on
Date: 2024.03.14 14:46:40 – 07'00'***
For PATRICK PULUPA
Executive Officer

Attachments:

Revised Notice of Applicability
Attachment 1: Facility Location
Attachment 2: Staff Memorandum

cc: (Via Electronic Mail with Attachments)
Christine Karl, Permitting & LEA Support, CalRecycle, Sacramento
Natalia Subbotnikova, San Joaquin County Environmental Health Department,
Stockton
Brianna St. Pierre, Land Disposal Program, DWQ, SWRCB, Sacramento
Howard Hold, Central Valley Regional Water Board, Rancho Cordova
Brendan Kenny, Central Valley Regional Water Board, Rancho Cordova
Brad Shelton, Central Valley Regional Water Board, Rancho Cordova

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

Forward, Inc.
Forward Resource Recovery Facility
San Joaquin County

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14 March 2024

Stephani Gisi, Central Valley Regional Water Board, Rancho Cordova
Sangeeta Lewis, Lewis Engineering, Piedmont

Central Valley Regional Water Quality Control Board

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Oswaldo Cordero, Environmental Manager
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9999 South Austin Road
Manteca, CA 95336

REVISED NOTICE OF APPLICABILITY

WATER QUALITY ORDER 2020-0012-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING
OPERATIONS
FORWARD RESOURCE RECOVERY FACILITY
FORWARD INC.
SAN JOAQUIN COUNTY

Forward Inc. a subsidiary of Republic Services Inc. (hereinafter referred to jointly as “Discharger”) owns and operates the Forward Landfill, which is located approximately 7 miles southeast of Stockton in San Joaquin County, Section 3 and 10, Township 1S, Range 7E, Mount Diablo Base and Meridian (MDB&M) and Section 34, Township 1N, Range 7E, MDB&M as shown in **Attachment 1**. The Forward Resource Recovery Facility (Facility) is situated on the southern portion of Forward Landfill. On 18 October 2021 the Discharger submitted a *Notice of Intent* (NOI), filing fee, and technical report for Forward Resource Recovery Facility to obtain coverage under Water Quality Order 2020-0012-DWQ, General Waste Discharge Requirements for Commercial Composting Operations (hereafter General Order), for composting operations at the above-referenced site. The complete [General Order](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2020/wqo2020_0012_dwq.pdf) can be accessed at: (https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2020/wqo2020_0012_dwq.pdf).

This Notice of Applicability (NOA) was developed after the review of the Discharger’s NOI, technical report and Technical Memo as described in the attached *Staff Memorandum (Attachment 2)*, which is a part of this NOA. Based on staff’s review, the Facility meets the conditions of the General Order, and is hereby covered under State Water Resources Control Board (State Water Board) General Order **2020-0012-DWQ-R5S013** as a **Tier II** composting operation. The Discharger must comply with all Tier II requirements of the General Order.

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

The filing fee for Forward Resource Recovery Facility is based on Threat to Water Quality and Complexity rating of **3B**. The submitted filing fee covers the first year permitted by this NOA. The Discharger shall submit the required annual fee (as specified in the annual billing issued by the State Water Resources Control Board) until the Notice of Applicability is officially terminated.

To fully comply with this NOA, the Discharger should familiarize itself with the contents of the enclosed Staff Memorandum and all of the requirements of the General Order. This Discharger is responsible for implementing all operations in a manner that complies with the General Order, including any additional site-specific mitigation measures identified in the Discharger's Technical Report for water quality protection. Any noncompliance with this General Order and/or failure to implement mitigation measures identified for water quality protection constitutes a violation of the Water Code, and is grounds for enforcement action, and/or termination of enrollment under this General Order.

Conditions of the General Order include but are not limited to:

- The Water and Wastewater Management Plan as submitted in the Technical Report and approved by staff in this NOA, must be implemented including but not limited to the following requirements:
 - Compliance with Compost Pad Specifications;
 - Compliance with Wastewater Pond Specifications;
 - Compliance with Compost Wastewater Drainage Conveyance Structure Specifications; and
 - Compliance with operational and maintenance requirements.
- Drainage conveyance systems must be maintained for conveyance of wastewater from the working surface in addition to direct precipitation from a 25-year, 24-hour peak storm event at a minimum. Ditches must be:
 - properly sloped to minimize ponding and kept free and clear of debris to allow for continuous flow of liquid.
 - adequately protected from erosion, and must not cause, threaten to cause, or contribute to conditions resulting in contamination, pollution, or nuisance; and
 - inspected and cleaned out annually prior to the wet season.
- The Discharger shall inspect all precipitation, diversion, and drainage facilities for damage within **7 days** following major storm events. Necessary repairs shall be completed within **30 days** of the inspection. The Discharger shall report any damage and subsequent repairs including photographs of the problem and repairs in the Annual Monitoring and Maintenance Report.

- The Annual Monitoring and Maintenance Report, technical reports, and all monitoring reports must be uploaded into the State Water Board's GeoTracker database.
- Submittal of final design report(s) i.e., plans, specifications, CQA manual, etc. for any improvement involving the containment of waste i.e., compost pads, conveyance structures, detention ponds at least 60 days prior to solicitation for construction bids.
- Prior to any facility expansion, a technical report with design information will have been submitted for approval by the Central Valley Water Board at least 90 days prior to new construction of working surfaces, stormwater (detention) ponds, berms, ditches, or any other water quality protection containment. The design information must include water balance calculations for detention ponds and wastewater conveyance features. Post-construction reports must be submitted 60 days after the completion of each construction activity.
- Any expansion of facility operation must meet the requirements of the General Order prior to commencement of composting operations in any new area.
- A revised NOI is required at least 90 days prior to:
 - adding a new feedstock, additive, or amendment;
 - changing material or construction specifications; or
 - changing an operation or activity not described in the approved NOI and technical report which has not been approved in this NOA.
- The Technical Report stated that, "surface water from the site flows west and ultimately discharges into Littlejohn's Creek approximately 2.5 miles northwest of the facility." Pursuant to Water Code section 13263, subdivision (g), the discharge of waste into waters of the state is a privilege, not a right, and adoption of this General Order does not create a vested right to discharge wastes into the waters of the state. Failure to prevent conditions that create or threaten to create pollution or nuisance or that may unreasonably degrade waters of the state will be sufficient reason to modify, revoke, or enforce this General Order.

Attachment B of the General Order and the Discharger's Technical Report includes specific monitoring and reporting requirements that the Discharger must comply, including routine monitoring and reporting to the Central Valley Regional Water Control Board. The first year Annual Monitoring and Maintenance Report as identified in the General Order must be submitted to the Central Valley Regional Water Board no later than **1 April 2024**, and then annually by 1 April each year.

All reports and other correspondence must be converted to searchable Portable Document Format (PDF) and submitted electronically to the State Water Board's [GeoTracker database](http://geotracker.waterboards.ca.gov) (<http://geotracker.waterboards.ca.gov>) with a confirmation email to centralvalleysacramento@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

Attention:	Brendan Kenny, Compliance and Enforcement Unit Brendan.Kenny@waterboards.ca.gov (916) 464-4635
Discharger Name:	Forward, Inc.
Facility Name:	Forward Landfill
County:	San Joaquin County
CIWQS Place ID:	225098

Now that the NOA has been issued, the Board's Compliance and Enforcement Section will provide management of this composting site. Brendan Kenny is your point of contact for any questions about the General Order and NOA, and you may contact him at the contact email and/or phone number provided above. If you find it necessary to make a change to your permitted operations, Brendan Kenny will direct you to the appropriate Permitting staff.

Original Digitally Signed by John J. Baum on

Date: 2024.03.14 14:46:06 – 07'00'

For PATRICK PULUPA
Executive Officer

Attachments:

Attachment 1: Facility Location

Attachment 2: Staff Memorandum

cc: (Via Electronic Mail with Attachments)

Christine Karl, Permitting & LEA Support, CalRecycle, Sacramento

Natalia Subbotnikova, San Joaquin County Environmental Health Department,
Stockton

Brianna St. Pierre, Land Disposal Program, DWQ, SWRCB, Sacramento

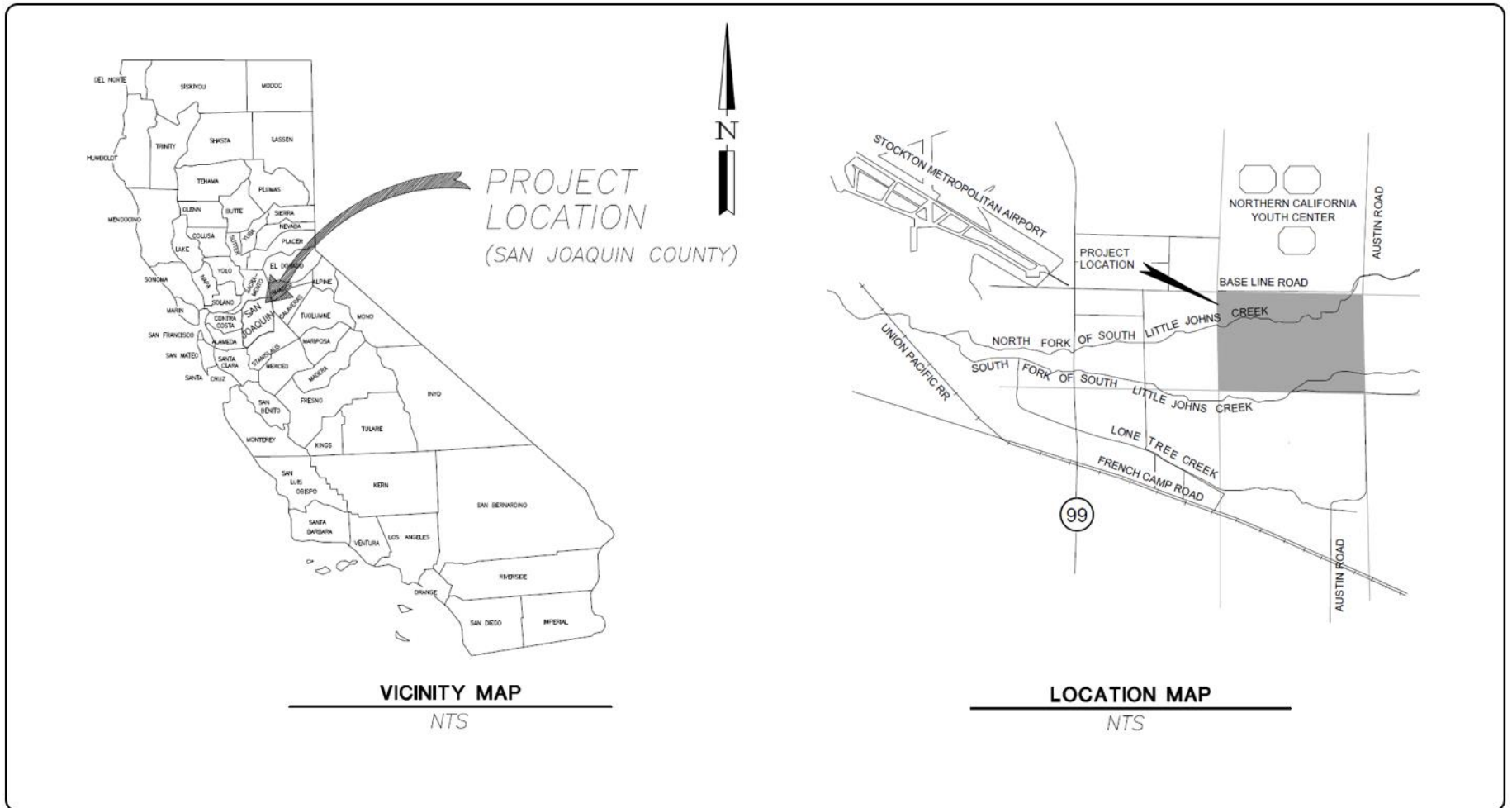
Howard Hold, Central Valley Regional Water Board, Rancho Cordova

Brendan Kenny, Central Valley Regional Water Board, Rancho Cordova

Brad Shelton, Central Valley Regional Water Board, Rancho Cordova

Stephani Gisi, Central Valley Regional Water Board, Rancho Cordova

Sangeeta Lewis, Lewis Engineering, Piedmont





Central Valley Regional Water Quality Control Board

TO: Brad Shelton, P.G.
Senior Engineering Geologist

J.J. Baum, P.E.
Assistant Executive Officer

FROM: Stephani Gisi
Water Resource Control Engineer
Title 27 Permitting and Mining Unit

DATE: 09 January 2024

SUBJECT: APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER 2020-0012-DWQ, FORWARD RESOURCE RECOVERY FACILITY, SAN JOAQUIN COUNTY

TECHNICAL REPORT

On 18 October 2021, Forward Inc. a subsidiary of Republic Services Inc. (hereinafter referred to jointly as “Discharger”) submitted a Notice of Intent (NOI) and technical report for Forward Resource Recovery Facility (Facility), which is located at the Forward Landfill. The technical report, NOI, and filing fee were submitted to obtain coverage under State Water Resources Control Board Order 2020-0012-DWQ, General Waste Discharge Requirements for Commercial Composting Operations (General Order), for composting operations at the Facility. The technical report was titled *Forward Resource Recovery Facility General Waste Discharge Requirement Technical Report – Tier II* (Technical Report) and was prepared on behalf of the Discharger by HDR Engineering Inc. The technical report was signed and stamped by Timothy J. Raibley (RCE 35322). Staff commented on the technical report in an email to the Discharger on 10 December 2021. Subsequently, the Discharger submitted a technical memorandum titled *Response to December 10, 2021, Comments on Technical Report* (Technical Memorandum), dated 02 March 2022.

Forward Resource Recovery Facility was previously operating under Waste Discharge Requirements (WDRs) Order No. R5-2014-0006 for Forward Landfill. The composting operation at Forward Landfill will no longer be regulated under the revised WDRs for the landfill.

SITE CONDITIONS

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

The existing Forward Resource Recovery Facility (Facility) composting operation is located at 9999 South Austin Road (on APN 201-060-030) in Manteca, California. The 39.1-acre Facility is located within the 744-acre Forward Landfill in San Joaquin County. The Facility and the landfill are owned and operated by Forward Inc.

The Technical Report describes depth to groundwater to be 50 to 70 feet below the groundwater surface (bgs), with seasonal variations in groundwater depth up to 10 feet. The groundwater flow velocity ranges from 0.001 to 0.003 ft/ft and generally flows in a north to northeasterly direction.

The Technical Report provided annual maximum (26.67 inches), minimum (4.61 inches), and average (13.31 inches) precipitation information for the area based on data from the NOAA Stockton Airport weather station at the time of submittal. The average annual pan evaporation is 78.43 inches for the area based on data from Oakdale Woodward Dam, located approximately 13 miles southeast. The magnitude of the 25-year 24-hour design storm water is estimated to be 2.83 inches according to the NOAA Atlas 14 Point Precipitation Frequency Estimates data server.

Land uses within one mile of the Facility include Forward Landfill and auxiliary properties as well as agricultural farmland. Water is supplied to the Facility by two on-site wells located on the eastern edge and southeastern corner of the Facility (Attachment A). Composting operations are prohibited within 100 feet of the wells. The closest named surface water body is the south fork of South Littlejohn's Creek (2.5 miles northwest of the Facility). The Facility property is bermed on the north edge to minimize the potential for storm water run-on and run-off.

Based on U.S. Department of Agriculture's (USDA's) Natural Resource Conservation Service (NRCS) soil survey soils in the vicinity of the Facility consists Clear Lake clay and Jacktone clay. The subsurface soils consist of interbedded layers of sand, silt, and lean clay.

COMPOSTING OPERATIONS

In 1994, composting operation began at the site. The San Joaquin County Environmental Health Department, Solid Waste Local Enforcement Agency (LEA), issued Solid Waste Facility Permit 39-AA-0020 (Permit) which authorized the Discharger to operate the composting facility. The Permit allows the composting of green materials, untreated wood waste, and food waste (non-vegetative). The Permit allows for the handling of up to 1,100 tons per day (tpd) for windrow composting. Of the 1,100 tpd of material, up to 200 tpd will be reallocated to an on-site aerated static pile (ASP) composting system. Total on-site capacity at any given time is allowed up to 156,377 cubic yards. The current allowable processing capacity is 489,859 cubic yards per year. The Facility does not utilize any additives or amendments. LEA approval is required prior to additive and amendment use as well as notification to the Central Valley Water Board.

The Facility utilizes the open windrow composting technique. Incoming material is delivered to the Facility and is weighed at the scale house. The material will be separated into windrow and ASP piles. Chipping and grinding will then occur before the feedstock are placed into a compost pile. The windrow composting area is roughly 11.5 acres with a composting period range of four to twelve weeks for the active phase and one to six months for the curing phase. A machine is used to turn the windrow piles. The ASP composting area is roughly 3 acres and utilizes forced positive aeration through the feedstock. The composting period range for the ASP compost is typically four weeks for the active phase and four weeks for the curing phase. Temperature and aeration are monitored throughout the ASP composting process. Post composting, the finished compost product is moved to the northwest corner of the Facility for screening, storage, and product load out.

The Facility has an existing 1.9-acre detention pond with a capacity of approximately 10.1 acre-feet and 2-foot freeboard (approximately 598,700 cubic feet or 4.5 million gallons). The Technical Report indicates that the detention pond capacity can contain a 25-year, 24-hour storm event volume of 5.4 acre-feet. The pond's containment system, from top to bottom includes:

- 60-mil single-sided textured HDPE geomembrane liner
- Geosynthetic clay liner (GCL)
- Prepared subgrade

The detention pond also has a 3-foot deep pan lysimeter located in the southwest corner. Access to the pan lysimeter is via an 18-inch HDPE riser pipe that extends to the crest of the retention pond.

MONITORING AND REPORTING

The Discharger will conduct a monitoring program as prescribed in the applicable portion of Attachment B of the General Order's Monitoring and Reporting Program (MRP). The first year Annual Monitoring and Maintenance Report as identified in the General Order must be submitted to the Central Valley Water Board no later than **1 April 2024** and then annually by 1 April each year.

The pan lysimeter underneath the detention pond shall be checked monthly and follow the monitoring requirements listed in Attachment B Section 2.

SITE CLOSURE

The Discharger will notify the Central Valley Water Board in writing within 90 days of the conclusion of site closure. A Site Closure Plan will be submitted to the Central Valley Water Board for review and approval.

RECOMMENDATIONS

Based on staff review of the Technical Report and Technical Memorandum, it is anticipated that the Discharger can meet the requirements of the General Order. The Notice of Applicability can be issued and stay in effect as long as the Discharger implements all operations in a manner that complies with the requirements of the General Order.

The Discharger must comply with the following items:

- The Water and Wastewater Management Plan as submitted in the Technical Report and approved by staff in this NOA, must be implemented including but not limited to the following requirements:
 - Compliance with Compost Pad Specifications;
 - Compliance with Wastewater Pond Specifications;
 - Compliance with Compost Wastewater Drainage Conveyance Structure Specifications; and
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information must include water balance calculations for detention ponds and wastewater conveyance features. Post-construction reports must be submitted 60 days after the completion of each construction activity.

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***Original Digitally Signed by Stephani Gisi on
Date: 2024.01.09 11:46:55 – 08’00’***

Stephani Gisi
Water Resource Control Engineer
Title 27 Permitting and Mining Unit

