

Attachment No. PC 4

Conceptual Fuel Modification Plan

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1.) The developer will obtain planting plan approval from the City prior to receiving final approval from all other permitting agencies; within fuel modification zones (FMZ), interior slopes/common area landscaping (SMA), and roadside protection zone (RPZ).

- 2) FMZ, SMA, and RPZ land areas were purchased and dedicated for the purpose of wildlife maintenance activities, beautification, and erosion control. Protected plants and habitats identified after Fuel Modification Plan approval through surveys or other biological programs cannot be retrofitted back within the limits of these areas.
- 3) The developer is responsible for ensuring that the calculated revenue from homeowners dues is sufficient to cover the cost of future maintenance based on the originally approved design. Changes to the fuel modification areas or interrupted maintenance activities by the final landowner, after the fuel modification areas are approved, will be the maintenance responsibility, become the responsibility of the final landowner.

- 4.) When a required maintenance area is located on commonly owner land, while the required adjoining property line foundation setback is located on homeowner's land, a written disclosure regarding the setback and vegetation requirement is required to be signed by the homeowner and the lot number referenced in the CC&Rs.

- 5.) The FMZ, SMA, and RPZ shall be maintained in perpetuity for fire safety purposes, and causes a covenant to be recorded and referenced in the CC&R's or on the property title when there is no HOA involvement.

- 6.) Prior to dropping lumber, call for a vegetation clearance inspection: Prior to dropping lumber, the developer/builder shall provide a separation of combustible vegetation for a minimum distance of 100 feet from the location of the structures and lumber stock pile. An inspection sign-off and/or release letter to the building department is required.

1. THIS PROJECT WILL COMPLY WITH: 2022 CRC, SECTION R337, CPC, AND 2022 CEC AND 2022 TITLE 24 ENERGY REGULATIONS AND ALL CITY ORDINANCES.
2. THE HOUSE STREET NUMBER WILL BE VISIBLE FROM THE STREET.
3. THE DISCHARGE OF POLLUTANTS TO ANY STORM DRAINAGE SYSTEM IS PROHIBITED. NO SOLID WASTE, PETROLEUM BYPRODUCTS, SOIL PARTICULATES, CONSTRUCTION WASTE MATERIALS, OR WASTE WATER GENERATED ON CONSTRUCTION SITES OR BY CONSTRUCTION ACTIVITIES SHALL BE PLACED CONVEYED OR DISCHARGED INTO THE STREET, GUTTER, OR STORM DRAIN SYSTEMS.

CONTRACTOR AGREES TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER/DEVELOPER COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER/DEVELOPER, COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

THIS PROJECT IS LOCATED IN A LOCAL RESPONSIBILITY AREA (LRA) VERY HIGH FIRE HAZARD SEVERITY ZONE AND ALL STRUCTURES SHALL BE CONSTRUCTED TO CHAPTER 7A OF THE 2022 CALIFORNIA BUILDING CODE (OR THEN APPLICABLE CODE AT TIME OF CONSTRUCTION).

CITY OF
NEWPORT BEACH

100 Civic Center Drive
Newport Beach, CA 92660

Contact:
Joselyn Perez - Senior Planner
Community Development Department

 ELSEVIER

3 MacArthur Place, Suite 1100
Santa Ana, CA 92707
714 966 9220

Contact:
Dina El Chammas Gass - Senior Asso.
714.966.9220

DUDEK

CONTACT:
Noah Stamm, Fire Protection Planner IV
Fire + Urban Forestry
760.642.8379

DRAWN BY:
L TERRY
DATE: 01/24/2025

DRAWN BY:
N STAMM

[illegible]

- Project Boundary Limit
- Zone B Interior Zone B equivalent non-combustible area)
- Zone B approximately 41 feet up to 108 feet Zone B irrigated landscape area
- Interior driveway and reserved access route
- Existing 12-inch, approximately 12-foot tall CMU wall

1

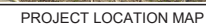
CITY OF NEWPORT BEACH

SHEET
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CONCEPTUAL FUEL MODIFICATION PLAN

RNG LANDFILL TO GAS ENERGY PLANT PROJECT
NEWPORT BEACH, CA

FUEL MODIFICATION PLAN AND NOTES	
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PROJECT NAME: THE LANDFILL GAS TO ENERGY PLANT - RNG PROCESSING PLANT FMP PROJECT

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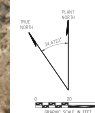
PROJECT ADDRESS: TOP OF 20662 NEWPORT COAST DRIVE
NEWPORT BEACH, CA 92657

APN: 478-031-071

LEGAL DESCRIPTION: PORTION OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 9 WEST

SCOPE OF WORK: THE LANDFILL GAS (LFG) INCINERATION PLANT INVOLVES THE INSTALLATION AND OPERATION OF A NEW RENEWABLE NATURAL GAS (RNG) PROCESSING PLANT AND A PIPELINE INTERCONNECT FACILITY (COLLECTIVELY CALLED THE RNG FACILITY). THE PROJECT SITE IS 4.14 ACRES AND IS CURRENTLY SURROUNDED BY A 12-FOOT PERIMETER WALL. THE PROPOSED RNG FACILITY WOULD HAVE A TOTAL FOOTPRINT OF 38,500 SQUARE FEET AND WOULD COVER EXISTING LANDFILL GAS (LFG) INTO A PIPELINE-QUALITY NATURAL GAS EQUIVALENT. THE PIPELINE INTERCONNECT FACILITY WOULD BE 1,000 FEET LONG AND 10 FEET WIDE.

JURISDICTION: NEWPORT BEACH FIRE DEPARTMENT



NBFD STAMP OF APPROVAL

Fuel Modification Plans and Maintenance Standards for Developers

Guideline G02

Attachment 1

The builder or developer shall call 949-644-3255

For these 3 Inspections, a permit number will be required:

1. Prior to Dropping of Lumber: Schedule a "Vegetation Clearance" Inspection:

Prior to dropping lumber, the developer/builder shall provide a separation of combustible vegetation for a minimum distance of 100 feet from the location of the structures and lumber stock-pile. An inspection sign-off and/or release letter to the building department is required.

2. Prior to Occupancy of the Building: Schedule a "Final Fuel Modification" Inspection:

The FMZ, SMA, and RPZ adjacent to structures must be installed, irrigated, and inspected. This includes physical installation of features identified in the approved precise fuel modification plans (including, but not limited to, plant establishment, thinning, irrigation, zone markers, access easements, etc.). A City Inspector will provide written approval of completion at the time of this final inspection on the building card. A written disclosure will be requested by the City Inspector indicating that the landowner is aware of the fuel modification zone on their land.

3. Prior to Home Owner Association (HOA) or Landowner Maintenance Acceptance from Developer or Builder: Schedule a "Owner Turnover" Inspection:

This inspection / meeting must happen with City staff prior to accepting the maintenance responsibility from the developer or builder. The inspection/meeting must include the following representatives:

- Landscape architect
- Property manager or homeowner
- HOA board member
- Installing landscape company
- HOA landscape company

At the time of turnover, the fuel modification areas shall be maintained by the developer or builder as originally installed and approved.

The accepting land owner is responsible for ensuring the developer or builder sufficiently calculated the amount of revenue needed to perform the on-going maintenance of the Fuel Modification Zones and any Special Maintenance Areas per the approved plans.

A copy of the approved plans must be provided to the HOA representatives or homeowner at this time.

Landscape architect must convey ongoing maintenance requirements to HOA representatives or homeowner.

An written disclosure will be required to be signed by the HOA representatives or homeowner indicating that the HOA or homeowner is aware of the fuel modification zone on their land and that they are aware of the importance of retaining the plans and the on-going maintenance.

The responsibility and necessary language for maintenance must also be stated within the CC and R's (Refer to Attachment 5).

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Fuel Modification Plans and Maintenance Standards for Developers

Guideline G02

Attachment 2

Introductory Maintenance Information

The Fuel Modification Zones (FMZ), Special Maintenance Areas (SMA), and Roadside Protection Zones (RPZ) shall be maintained in perpetuity for fire safety purposes, and shall cause a Covenant to be recorded and referenced in the CC and R's or on the property title when there is no HOA involvement.

Emergency access covenants shall be identified on the Tract Map indicating the reservation and restriction for permanent entry by the HOA or Fire Authority.

Maintenance Method

On-going maintenance shall occur as to preserve the originally approved design as found on the approved plans. Attachment 6 spacing is required and only approved planting species and arrangements on the plans are perpetually preserved.

- The property owner is responsible for all maintenance of FMZ, SMA, and RPZ.
- This includes a minimum of **two maintenance activities** each year.
- Perform maintenance sometime within time periods of middle to late spring and once again in early to middle fall. Typically, courtesy letters will be sent indicating the date of inspection.
- Other activities include: Grasses are cut to 4 inches after annual seeding. Attached dead and dying, all vegetation litter, and Attachment 7 species removed from the zones. Maintenance of irrigation systems. Replacement of dead or dying vegetation with approved species. Removal of trees and shrubs not on the approved plans.
- If maintained by an HOA, the landscape maintenance company and/or property manager shall inspect the fuel modification zones throughout the year to identify where specific maintenance activities need to take place.
- The City may conduct inspections of established fuel modification areas. Ongoing maintenance shall be conducted a minimum of twice each year regardless of the dates of these inspections.
- The property owner shall retain all approved fuel modification plans. The plans shall be used to perform the maintenance.
- Maintenance must be completed by the due date indicated in the courtesy letter in order to receive the City contribution (if applicable). If the work is not completed by the due date, citations may be issued and the City contribution (if applicable) will be forfeited.

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Fuel Modification Plans and Maintenance Standards for Developers

Guideline G02

Attachment 3

INCLINE MEASUREMENT FOR SELECTED SLOPES

(See Attachment 4)

Slope (Grade)

60° (173%)

50° (119%)

45° (100%)

40° (84%)

35° (70%)

30° (58%)

25° (47%)

20° (36%)

15° (27%)

10° (18%)

Zone

Zone

Zone

Zone

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NEWPORT BEACH FIRE DEPARTMENT

AM&M REQUEST FOR COMMERCIAL/INDUSTRIAL DEVELOPMENT

AM&M REQUEST

A. APPLICANT INFORMATION

City of Newport Beach

PROJECT NAME

RNG Landfill to Gas Energy Plant Project

APPLICANT'S ADDRESS

100 Civic Center Drive, Newport Beach, CA 92660

PROJECT ADDRESS

Top of 20662 Newport Coast Drive, Newport Beach, CA 92657

APPLICANT'S CONTACT NAME AND NUMBER

Joseph Perez - Senior Planner - (949) 644-3312

APPLICANT'S CONTACT EMAIL

jperex@newportbeach.ca.gov

C. PROJECT CONDITIONS & DIFFERENCES - Attach supporting documents, if any

Is this project located in a fire area, adjacent to fuel modification, or other recognized location of concern?

Yes: ☒ Yes: ☒ Wildfire Risk Area (SRA or (RA) (VHFHS2), ☒ fuel mod, ☐ Midway City, ☐ other:

Indicate type(s) of deficiencies - check all that apply and describe degree of deficiency in area provided:

☐ Hose pull exceeded: length of building perimeter exceeding hose pull: _____ feet

☐ Water supply deficient: ☐ pressure, ☐ quantity, ☐ duration, ☐ hydrant spacing/quantity

☐ Access to site deficient: ☐ road/cul-de-sac width, ☐ turning radii, ☐ no turnaround, ☐ grade >15%

☐ Access to structure deficient: ☐ topography/grade change, ☐ obstructions

☐ Other/Describe deficiency: 1) NBFD required 170' FMZ/minimum 100' FMZ from facilities cannot be met onsite

ALTERNATIVE PROPOSAL (provide brief description) 1) an existing approximately 12 foot tall and 12 inch thick non-combustible concrete masonry unit (CMU) wall surrounds the perimeter of the facility. This wall will remain and function as a fuel deflecting wall around the perimeter of the facility. In addition to the 12 foot tall non-combustible CMU fuel deflecting wall, the project currently and will continue to maintain approximately 113 feet of fuel modification around the northern side of the facility (approximately 12 foot wide of onsite access route and approximately 101 feet of fuel modification outside the perimeter wall); approximately 53 feet of fuel modification outside the perimeter wall; approximately 53 feet of fuel modification around the southern side of the facility (approximately 12 foot wide of onsite access route and approximately 41 feet of fuel modification outside the perimeter wall); and between approximately 50 feet and up to over 195 feet of fuel modification within the perimeter wall and outside the perimeter wall. The combination of the 12 foot fuel deflecting wall and approximately 41 feet of fuel modification will provide an equivalent amount of protection to the facility as a full 170 feet of fuel modification around all sides of the facility.

JUSTIFICATION (explain how the alternative is equal to or exceeds code requirements) 1) As mentioned above, the existing approximately 12 foot tall and 12 inch thick non-combustible CMU wall is proposed to remain and will act as a fuel deflecting fire wall. Due to sensitive habitat within the naturally vegetated open space areas outside the parcel boundary, it is not possible to achieve a full 170 feet of fuel modification this way as we are improving the 12 foot non-combustible CMU wall as a M&M for the reduced on-site fuel modification. Fire walls like these have proven to deflect heat and airborne embers on numerous wildfires in San Diego, Orange County, Los Angeles, Ventura, and Santa Barbara County. Several jurisdictions utilize minimum 8 foot tall CMU walls as Alternative methods based on observed performance during wildfires. This has led to numerous agencies approving use of non-combustible walls as mitigation for reduced FMZ and reduced setback at top of slope. These walls are consistent with NFPA 114 Standard for Reducing Structure Ignition Hazards from Wildland Fire-2008 Edition, Section 5.1.3.1 and A.5.1.3.3 and International Urban Wildland Interface Code (ICU-2012). NFPA 1144, A.5.1.3.1 states, "Non-combustible walls and barriers are effective for deflecting radiant heat and windblown embers from structures." These walls and barriers are usually constructed of non-combustible materials (concrete block, bricks, stone, stucco, etc.) or earth.

The above project does not fully conform to the 2022 California Fire Code. Pursuant to 2022 CFC Chapter 1, Section 104.10, I am requesting approval of an alternative material and/or method of construction to achieve the intent of the provisions of the code and provide at least an equivalent level of protection to that prescribed therein. I understand that approval of this request applies only to this project and shall not be construed as establishing a precedent for other projects. If approved, a copy of this AM&M request form shall be provided on all subsequent plan submittals of this project to the OCTA or Building Department.

Fire Protection Planner IV - Dudek

02-07-2025

SIGNATURE

TITLE & COMPANY

DATE

NBFD STAMP OF APPROVAL

PREPARED BY:

DUDEK

605 Third Street

Enchilota, CA 92244

CONTRACT:

North Starline, Fire Protection Plan IV

Fire - Urban Interface

760.642.8379

SHEET 2

CITY OF NEWPORT BEACH

SHEETS 3

CONCEPTUAL FUEL MODIFICATION PLAN

RNG LANDFILL TO GAS ENERGY PLANT PROJECT

NEWPORT BEACH, CA

NBFD GUIDELINE G-02 - ATTACHMENT SHEETS

Fuel Modification Plans and Maintenance Standards for Developers

Guideline G02

Attachment 4

ZONE MARKER DETAILS

(Marker Distances Shall Be Increased on Slopes to Accommodate Incline Measurements in Accordance With Attachment 3)

2'-0" ABOVE MATURE PLANT GROUND (4'-0" MIN.)

1 POST CAP

2 2"x8" ZONE INDICATOR

3 1/2" DIA. GALV. POST

4 CONC. PTO. 2800 PSI @ 30 DAYS

5 FINISH GRADE

6 COMPACTED BUEGRADE

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Fuel Modification Plans and Maintenance Standards for Developers

Guideline G02

Attachment 6

Requirements for Planting Installation in Fuel Modification Zones

(For on-going requirements, see Attachment 2, and the Vegetation Management Maintenance Guidelines)

Shrub and Tree Form Shrub Horizontal Grouping and Spacing (when > 2 feet in height) as measured from the edge of the group

Shrub Height

Vertical Separation

4" min

2' max

Horizontal Spacing

3x or 15' min for Shrubs; (or 30' for Trees)

Vegetation Less Than 2 Feet in Height:

- No horizontal spacing or vertical separation is required. Ground cover shall not exceed 2 feet in height. In Zone B, ground cover shall cover the entire ground between groups of shrubs, trees, or grasses and grasses are not considered ground cover. Limited compartments of grasses are acceptable as approved on the planting plans. In Zone C/D grasses can cover the entire area.
- All Shrubs and Trees can be in groups of 3 specimens or less. No horizontal spacing is required inside the group.
- Shrub / Tree-Form Shrub Group Spacing
 - Groups of shrubs shall be spaced by the greater of the following two measurements: A distance of 15 feet minimum (gt) 3 times the height of the tallest specimen in any of the groups.
 - No vegetation over 2 feet in height is allowed within 15 feet from the edge of tree canopy(s).
- Tree Group Spacing
 - Groups of Trees shall be spaced by a distance of 30 feet minimum regardless of height. In Zone "A" full growth tree branches are not allowed within 10 feet of enclosed combustible structures.

Shrubs and Trees Less Than 10 Feet in Height:

- When the fuel modification zone is within 30 feet of the structure, a vertical separation of 2 feet minimum is required from the vegetation below. (Not required if shrubs are farther than 30 feet from structure).

Shrubs and Trees 10 Feet in Height or Greater:

- A vertical separation of 4 feet minimum is required to be maintained from the vegetation below.
- Trees only: All vegetation located underneath trees, shall be a maximum of 2 feet in height.

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Fuel Modification Plans and Maintenance Standards for Developers

Guideline G02

Attachment 7

UNDESIRABLE AND INVASIVE PLANT SPECIES

Certain plants are considered to be undesirable and invasive due to their characteristics. These characteristics can be either physical or chemical. Physical properties that would contribute to high flammability include large amounts of dead material retained within the plant, rough or peeling bark, and the production of copious amounts of litter. Chemical properties include the presence of volatile substances such as oils, resins, wax, and pitch. Certain native plants are notorious for containing these volatile substances.

Plants with these characteristics shall not be planted in any fuel modification zones. Should these species already exist within these areas, they shall be removed because of their invasiveness or potential threat they pose to any structures.

PLANT SPECIES (MANDATORY REMOVAL)

Botanical Name

Cynara Cardunculus

Ricinus Communis

Cirsium Vulgare

Brassica Nigra

Silybum Marianum

Succula Australis

Nicotiana Glagevili

Nicotiana Glancia

Lactuca Scariola

Coryza Canadensis

Heterotheca Grandiflora

Ambrosia Confusa

Urtica Urens

Cardaria Draba

Brassica Rapa

Adenostoma Fasciculatum

Adenostoma Sparulifolium

Cortaderia Selloana

Artemisia Californica

Eriogonum Fasciculatum

Salvia Melifera

Nassella/Stipa Teniusima

Common Name

Artichoke Thistle

Caster Bean Plant

Wild Artichoke

Black Mustard

Milk Thistle

Russian Thistle/Tumbleweed

Indian Tobacco

Tree Tobacco

Prickly Lettuce

Horseweed

Telegraph Plant

Mayweed

Burning Nettle

Noary Cress, Perennial Peppergrass

Wild Turnip, Yellow Mustard, Field Mustard

Chamise

Red Shanks

Pampas Grass

California Sagebrush

Common Buckwheat

Black Sage

Mexican Feathergrass

Ornamental:

Cortaderia

Cyperus

Eucalyptus sp

Juniperus sp

Pinus sp

Pampas Grass

Cyperus

Eucalyptus

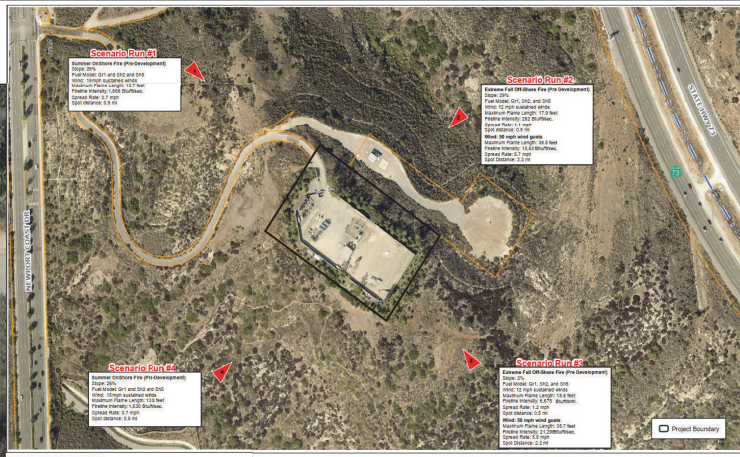
Juniper

Pine

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SOURCE: NBFD GUIDELINE G-02, MARCH 2016



The Project site is located at the top of a hill at 20662 Newport Coast Drive and within the boundary of the closest CCL. The project site has an established concrete pad which was previously developed with a landfill gas-to-energy plant which has since been demolished. The entire project site is enclosed by a 12-foot tall perimeter CMU wall with surrounding trees on all sides and well-maintained understory vegetation. The area immediately outside the perimeter wall includes a variety of native and non-native trees. The OCLR currently maintains the area outside the perimeter of the walled project site per a Tree Replacement and Revegetation Plan adopted by the City in July 2016 as part of the Coyote Canyon Landfill Gas Recovery Facility Demolition and Telecom Update project. The Tree Replacement and Revegetation Plan provides guidelines for the removal of dead or unhealthy non-native trees and installation of native trees and understory species within the OCLR's property limits surrounding the project site. The proposed project would require the removal of 28 trees that are immediately outside the perimeter wall of the project site within an approximately 20-foot-wide non-native grass sloped area. The trees would be removed to protect the surrounding area from fire risk associated with the proposed RNG facility. The City adopted Tree Replacement and Revegetation Plan would be supplemented with a project-specific Fuel Modification Plan that would be in compliance with the City's Fuel Modification Plans and Maintenance Standards for Developments and the requirements of NBFD. The naturally-vegetated, open space area immediately outside the property boundary is within a Central Coast NCCP/HCP and habitat conservation area where no coastal sage scrub or other covered habitat shall be impacted.

NBFD STAMP OF APPROVAL

PREPARED BY: DUDEK 605 Third Street Encinitas, CA 92024	SHEET 3	CITY OF NEWPORT BEACH	SHEETS 3
CONCEPTUAL FUEL MODIFICATION PLAN RNG LANDFILL TO GAS ENERGY PLANT PROJECT NEWPORT BEACH, CA			
CONTACT: Noah Stamm, Fire Protection Planner IV Fire - Urban Forestry 760.642.8379			
TREE REMOVAL MAP AND PHOTOGRAPHS			

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