

AGENDA - PUBLISHED

Airport Land Use Commission

Thursday, October 16, 2025

7:00 PM

30 Muir Rd., Martinez | https://cccounty-us.zoom.us/j/849750387 48 | Call in: (888) 278-0254 access code 198675

Agenda Items: Items may be taken out of order based on the business of the day and preference of the Committee

- 1. Call to Order
- 2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two minutes).
- 3. Consent Item(s). (Items are subject to removal from Consent Calendar by request of any Commissioner or on request for discussion by a member of the public. Items removed from the Consent Calendar will be considered with the discussion items under "Public Hearing.")
- **3.a.** April 17, 2025 and September 18, 2025 ALUC Meeting Minutes.

25-4280

<u>Attachments</u>: <u>ALUC_25-04-17_Meeting_Minutes</u>

ALUC 25-09-18 Meeting Minutes

3.b. Past and Pending Projects Report.

25-4281

Attachments: Past-Pending Projs Log (V.3)

LP25-2033 comments (ALUC)

4. Public Hearing, Action, Discussion and Information Item(s)

25-4282

4.a. APPROVE County File No. LP21-2042: Applicant requests a review and determination of consistency with the Contra Costa Airport Land Use Compatibility Plan for a proposed green material composting business on a 40.61-acre site (two parcels of 20.25-acres and 20.36-acres) located at 124 & 136 Bethany Lane in unincorporated Byron. (Assessor's Parcel Numbers 001-041-057 and 001-041-058) (Jamar Stamps, ALUC staff) (Action) (Continued from September 18, 2025 ALUC meeting)

Attachments: (Exhibit A) 9-18-25 ALUC Staff Report and Project Information

(Exhibit B) LP21-2042 (Oliveira Composting) ppt

- 5. Commissioner Updates
- 6. Staff Updates
- 7. Adjourn

The next meeting is currently scheduled for Thursday, November 20, 2025, 7:00 p.m.

The Committee will provide reasonable accommodations for persons with disabilities planning to attend the Committee meetings. Contact the staff person listed below at least 72 hours before the meeting. Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Committee less than 96 hours prior to that meeting are available for public inspection at 30 Muir Rd, Martinez, CA 94553, during normal business hours. Staff reports related to items on the agenda are also accessible online at www.contracosta.ca.gov. If the Zoom connection malfunctions for any reason, the meeting may be paused while a fix is attempted. If the connection is not reestablished, the committee will continue the meeting in person without remote access. Public comment may be submitted via electronic mail on agenda items at least one full work day prior to the published meeting time.

For Additional Information Contact: Jamar Stamps, ALUC staff, (925) 655-2917



1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-4280 **Agenda Date:** 10/16/2025 **Agenda #:** 3.a.

Advisory Board: Airport Land Use Commission

Subject: April 17, 2025 and September 18, 2025 ALUC Meeting Minutes

Presenter: Jamar Stamps, AICP, ALUC staff

Contact: (925) 655-2917

Information: April 17, 2025 and September 18, 2025 ALUC Meeting Minutes.

1025 ESCOBAR STREET MARTINEZ, CA 94553



Meeting Minutes - Final

Thursday, April 17, 2025 7:00 PM

30 Muir Rd., Martinez | https://cccounty-us.zoom.us/j/84975038748, Meeting ID: 849 7503 8748 | Call in: (888) 278-0254 access code 198675

Airport Land Use Commission

Agenda Items: Items may be taken out of order based on the business of the day and preference of the Committee

1. Call to Order

Present Richard Cunningham, Laura Hoffmeister, Geoff Logan, and Carlyn

Obringer

Absent Allison Picard

- 2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two minutes).
- 3. Consent Item(s). (Items are subject to removal from Consent Calendar by request of any Commissioner or on request for discussion by a member of the public. Items removed from the Consent Calendar will be considered with the discussion items under "Public Hearing.")

3.a.

Attachments: ALUC Project Log

Accepted the report.

4. Public Hearing, Action, and Discussion Item(s)

4.a.

Attachments: (Exhibit A) AAM-I28-Implementation-Plan

(Exhibit B) Air taxi startup Flights to SFO will cost same as an Ub

(SF Chron)

(Exhibit C) Archer Aviation - Archer Unveils Planned LA Air Taxi (Exhibit D) Aviation Week Doubles eVTOL Forecast To 2,000

Deliveries By 2030

(Exhibit E) eVTOL starting to take shape

Accepted the report, Commission provided direction to ALUC staff.

Commission directed ALUC staff to consult with other agencies. If relying on consultants, confirm they have (or access to) expertise on AAM. Research what lessons can be learned from Southern CA and NYC AAM operations. All research needs to be considered through the lens of local/ALUC regulations.

5. Staff Updates

None.

6. Commissioner Updates

None.

7. Adjourn

Adjourn: 8:34 p.m.

The next ALUC meeting is currently scheduled for Thursday, May 15, 2025, 7:00 p.m.

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To be notified of future ALUC meetings, go to https://contra-costa.legistar.com/Calendar.aspx.

For Additional Information Contact: Jamar Stamps, ALUC staff, (925) 655-2917

1025 ESCOBAR STREET MARTINEZ, CA 94553



Meeting Minutes - Final

Thursday, September 18, 2025 7:00 PM

30 Muir Rd., Martinez | https://cccounty-us.zoom.us/j/84975038748 | Meeting ID: 849 7503 8748 | Call in: (888) 278-0254 | access code 198675

Airport Land Use Commission

Agenda Items: Items may be taken out of order based on the business of the day and preference of the Committee.

1. Call to Order

Present Richard Cunningham, and Geoff Logan

Excused Laura Hoffmeister, Carlyn Obringer, and Allison Picard

- 2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two minutes).
- 3. Consent Item(s). (Items are subject to removal from Consent Calendar by request of any Commissioner or on request for discussion by a member of the public. Items removed from the Consent Calendar will be considered with the discussion items under "Public Hearing.")

3.a.

Attachments: 2512 M Airport Land Use Commission 25-04-17 Meeting Min

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Item continued due to lack of quorum.

This Consent Item was continued.

3.b.

Attachments: Project Log from ALUC AGENDA Pkt 3-20-25

Item continued due to lack of quorum.

This Consent Item was continued.

4. Public Hearing, Action, Discussion and Information Item(s)

4.a.

Attachments: (Exhibit A) ALUC SR (12-16-21)

(Exhibit B) Project Description (Exhibit C) ALUC Letter 12-17-21

(Exhibit D) FAA determination letter (Dec 2022) (Exhibit E) LP21-2042 (Oliveira Composting ppt)

Item continued due to lack of quorum.

This Discussion Item was continued.

4.b.

This Discussion Item was received.

5. Adjourn

7:45 p.m.

The next meeting is currently scheduled for Thursday, October 16, 2025, 7:00 p.m.

The Committee will provide reasonable accommodations for persons with disabilities planning to attend the Committee meetings. Contact the staff person listed below at least 72 hours before the meeting. Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Committee less than 96 hours prior to that meeting are available for public inspection at 30 Muir Rd, Martinez, CA 94553, during normal business hours. Staff reports related to items on the agenda are also accessible online at www.contracosta.ca.gov. If the Zoom connection malfunctions for any reason, the meeting may be paused while a fix is attempted. If the connection is not reestablished, the committee will continue the meeting in person without remote access. Public comment may be submitted via electronic mail on agenda items at least one full work day prior to the published meeting time.

For Additional Information Contact: Jamar Stamps, ALUC staff, (925) 655-2917



1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-4281 **Agenda Date:** 10/16/2025 **Agenda #:** 3.b.

Advisory Board: Airport Land Use Commission Subject: Past and Pending Projects Report Presenter: Jamar Stamps, AICP, ALUC staff

Contact: (925) 655-2917

Information: Past and Pending Projects Report.

Contra Costa ALUC Past/Pending Project Review Log

Project Initiation	File#/Name Location (Lead Agency)	Project Description	ALUC Approval (Staff or Commission)
September 2025	LP25-02033 APN: 002-210-021 (Unincorporated Contra Costa County)	Proposed construction and operation of the Hubard Farming & Forestry Clean Power Project, a 6.6-megawatt solar generation facility with a battery storage system.	Staff: 9/30/25
July 2024	DP21-03022 APN: 125-010-023 (Unincorporated Contra Costa County)	Proposed logistics warehouse totaling 223,145 square feet, including approximately 213,962 square feet of warehouse space and approximately 9,183 square feet of ancillary office space, 3.11 acres of on-site stormwater treatment areas (detention and bioretention), and a rooftop photovoltaic ("PV") solar energy system.	Commission: 1/16/25 (ALUC Determination Letter sent 1/21/25)
April 2024	GP18-00001 APN: Countywide (Unincorporated Contra Costa County)	Comprehensive Countywide General Plan Update.	Commission: 7/18/24 (ALUC Determination Letter sent 7/19/24)
May 2023	AC23-00001 APN: 125-020-058 (Contra Costa County/ Unincorporated Pacheco)	Proposed "Concord Cascade Solar Installation" which includes installation of a roof-mounted solar photovoltaic ("PV") system on an existing building and three new carport structures over existing parking lots within an existing residential community.	Staff: 6/7/23
May 2022	LP22-2017 APN: 001-041-064 (Contra Costa County/ Unincorporated Byron)	Proposed second residence on an 85-acre site.	Staff: 5/17/22
	LP22-2013 APN: 001-061-007 (Contra Costa County/ Unincorporated Byron)	Proposed industrial hemp farm on an existing 300-acre site (18-acres within Contra Costa County and 282-acres within Alameda County).	Commission: 6/16/22 (ALUC Determination Letter sent 6/17/22)
April 2022	DP22-3012 APN: 002-200-021, -014 (Contra Costa County/ Unincorporated Byron)	Byron Hot Springs Hotel. Improvements include only structural restoration of the existing hotel building to prevent further deterioration (i.e., no building footprint expansion) and filling two manmade ponds (Pond 1: 53,424 cubic yards of fill and Pond 2: 50,099 cubic yards) from the previous golf course. Once improvements are completed the hotel will not be in operation or open to the public.	Staff: 4/20/22

ALUC = Airport Land Use Commission
ALUCP or Plan = Contra Costa Airport Land Use Compatibility Plan

Updated 1/21/25

Contra Costa ALUC Past/Pending Project Review Log

Project Initiation	File#/Name Location (Lead Agency)	Project Description	ALUC Approval (Staff or Commission)
December 2021	AC21-0006 APN: (multiple) (City of Concord)	Proposed John Muir Concord Medical Center Seismic Replacement and Modernization Project which includes demolition of several existing hospital buildings and construction of new buildings, expansion of parking areas with new photovoltaic solar canopies, and a new helipad.	Commission: 11/17/22 (ALUC Determination Letter sent 11/18/22)
	PR21-2011 APN: 002-210-020 (Contra Costa County/ Unincorporated Byron)	Preapplication review for the proposed expansion of an existing wood, green waste, concrete, and asphalt recycling facility ("Organics Recycling Facility") to include a food, green waste, and mulching operation on approximately 20-acre site	Staff: 1/4/22 (Note: Preapplication comments only)
October 2021	LP21-2042 APN: 001-041-057, -058 (Contra Costa County/ Unincorporated Byron)	Proposed commercial (not open to the public) green material composting facility on approximately 30 acres of a 50-acre site.	In process (ALUC hearing 12/16/21, letter sent to County staff)
August 2021	AC21-0004 APN: 126-325-004 (City of Concord)	Future Chrysler Dodge Jeep Ram of Concord. Future Chrysler Dodge Jeep Ram of Concord is planning to move their current new auto dealerships and related service operations from 4901 Marsh Road to 2121 Diamond Blvd. (former auto dealership). To accommodate their new location, they will be remodeling the existing building currently occupied by ServiceMaster.	Staff: 8/23/21
June 2021	AC21-0003 APN: 159-140-042 (Contra Costa County/ Unincorporated Martinez)	Contra Costa Central Sanitary District ("Central San") proposes construction and operation of a 1.75-megawatt solar facility on approx. 8.2 acres of a 48-acre parcel (APN 150-140-042), which is owned by Central San.	Commission: 8/19/21
May 2021	LP21-2016 APN: 125-046-009 (Contra Costa County/ Unincorporated Pacheco)	Proposed 65' digital display sign (billboard), replacing existing 45' static billboard.	Withdrawn: 7/19/22
April 2021	LP21-2011 APN: 002-190-002 (Contra Costa County/ Unincorporated Byron)	1,500 ton per day construction and demolition debris recycling operation with products sold on and off-site (no proposed storage of hazardous materials).	Staff: 5/11/21

ALUC = Airport Land Use Commission
ALUCP or Plan = Contra Costa Airport Land Use Compatibility Plan

Updated 1/21/25



CONTRA COSTA COUNTY DEPARTMENT OF CONSERVATION & DEVELOPMENT

30 Muir Road, 2nd Floor Martinez, CA 94553

Telephone: (925) 655-2917 Fax: (925) 674-7258

TO: Adrian Veliz, Current Planning Section

FROM: Jamar Stamps, Transportation Planning Section, ALUC staff

DATE: September 30, 2025

SUBJECT: Comments on proposed 6.6-megawatt solar generation facility

County File #LP25-2033, APN: 002-210-021

Thank you for the opportunity to comment on the subject project. The applicant is requesting a review and determination of consistency with the *Contra Costa Airport Land Use Compatibility Plan* ("Plan") for the proposed construction and operation of the Hubard Farming & Forestry Clean Power Project, a 6.6-megawatt solar generation facility with a battery storage system. The solar arrays will be ground mounted to a single axis tracker system. The subject site is located west of Byron Highway, approximately ¾-mile northeast of the closest Byron Airport Runway (Runway 12). The Airport Land Use Commission ("ALUC" or "Commission") relies on the Plan, as well as applicable state and federal regulations to review airport (non-aviation) and adjacent land use development proposals. After reviewing the information provided (proposed project plans referred to ALUC staff 9/5/25), ALUC staff finds the following:

County File #LP20-2028 and LP20-2029 (Byron Solar Projects)

In December 2020, the ALUC held a public hearing on two proposed commercial photovoltaic ("PV") solar facilities: 1) 6.5-acre PV facility on a 10-acre parcel (APN 002-210-019), and 2) 35-acre PV facility on a 126.48-acre parcel (APN 002-210-025). Both proposed solar facilities include the use of a single axis tracker system.

Glare impact studies were completed for each of the proposed solar facilities consistent with Federal Aviation Administration ("FAA") guidance and concluded neither proposed solar facility would result in hazardous glare (see attached 12/17/20 ALUC staff report, Section V). FAA Obstruction Evaluation/Airport Airspace Analysis' were also completed and determined marking and lighting for aviation safety was not necessary.

The Commission conditionally approved a motion (vote: 7-0) determining the subject projects are consistent with the *Contra Costa Airport Land Use Compatibility Plan* ("ALUCP"). The ALUC determination letter is attached for reference.

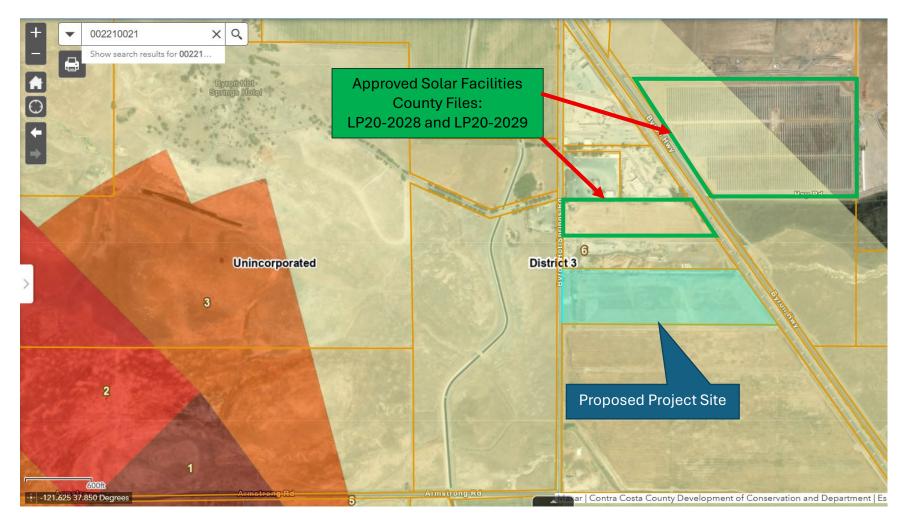
Conclusion

Based on the proximity of the proposed project site relative to previously studied solar facilities of a similar scale, ALUC staff finds that the proposed project does not contain characteristics likely to result in inconsistencies with ALUCP compatibility criteria.

att: a) Aerial Site Map

- b) 12/17/20 ALUC Staff Report w/out exhibits (exhibits available upon request)
- c) 12/17/20 ALUC Determination Letter

Byron Airport Safety Zone 6



Project Title, File: 6.6-Megawatt Solar Generation Facility, County File# LP25-2033

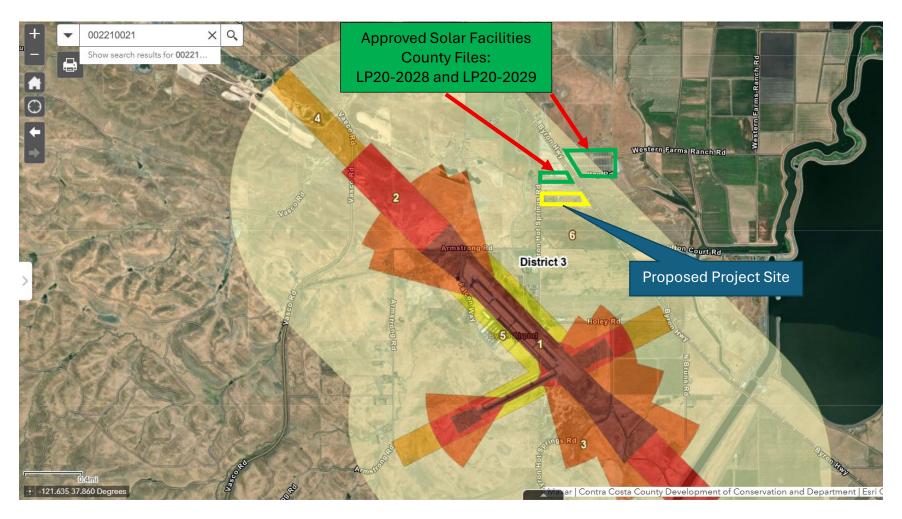
Project Site Address: 5675 Hope Way, Byron, CA 94514

Assessor's Parcel Number ("APN"): 002-210-021

Byron Airport Influence Area: Proposed Project Site located west of Byron Highway, approximately ¾-mile northeast of

Byron Airport Runway 12

Byron Airport Safety Zone 6





Department of Conservation and Development

Airport Land Use Commission

Thursday, December 17, 2020 – 7:00 P.M.

STAFF REPORT Agenda Item # <u>4.a.</u>

Project Title: Renewable Properties, LLC Byron Solar Project

ALUC File #: County Files #LP20-2028 and #LP20-2029

Lead Agency: Contra Costa County

Applicant/Owner: RPCA Solar 2, LLC and RPCA Solar 3, LLC

10-acre site (6.5-acre Solar Project)

5525 Hope Way, Byron, CA

Assessor's Parcel Number: 002-210-019

Site Address/Location:

126.48-acre site (35-acre Solar Project) Byron Highway/Rankin Road, Byron, CA Assessor's Parcel Number: 002-210-025

Staff Recommendation(s): APPROVE with condition(s).

Exhibit A: Proposed Project Plans

Exhibit B: ALUC Comment Letter (7/26/18) Exhibit C: Byron Airport Compatibility Zones

List of Exhibits: Exhibit C: Byron Airport Compatibility Zol

Exhibit D: Glare Impact Studies
Exhibit E: FAA Aeronautical Studies

Staff Contact: Jamar Stamps, AICP, (925) 674-7832

I. PROJECT SUMMARY

The applicant requests approval of Land Use Permits for the installation of two proposed commercial photovoltaic ("PV") solar facilities:

- A. 6.5-acre PV facility on a 10-acre parcel.
- B. 35-acre PV facility on a 126.48-acre parcel.

Proposed improvements also consist of new ancillary infrastructure (i.e., meters, transformers, etc.), fencing, and new paved private access roads. The projects will connect to existing utility poles. The two project sites are located along Byron

Highway near the intersection of Rankin Road in the Byron area of unincorporated Contra Costa County ("County"). Proposed project plans are provided in Exhibit A.

II. RECOMMENDATION

APPROVE the proposed projects per the following condition:

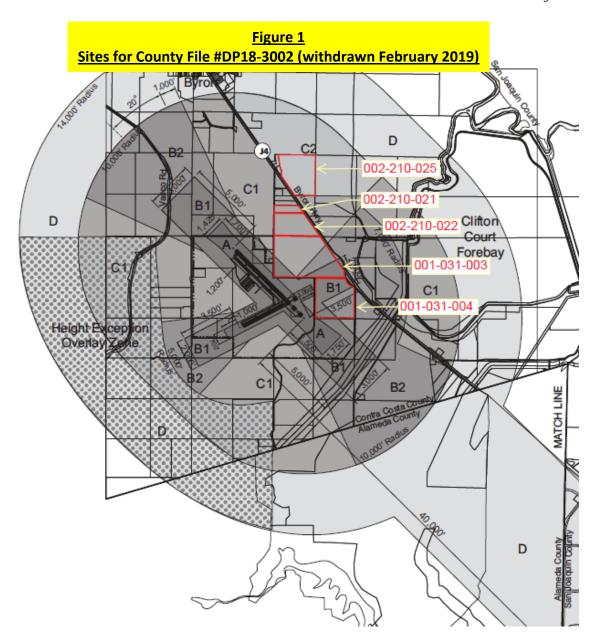
A. Glare or distracting lights, which could be mistaken for airport lights, could pose a flight hazard and shall be shielded downward to ensure they do not aim above the horizon.

III. BACKGROUND

County File #DP18-3002 (withdrawn)

In 2018, the County received a Development Plan application for a proposed outdoor solar power generation facility with other agricultural uses including grazing, honeybee foraging, habitat conservation, as well as a rezone from General and Heavy Agricultural to Planned Unit District over approximately 621 acres encompassing five parcels (Figure 1). Contra Costa Airport Land Use Commission ("ALUC" or "Commission") staff received a project referral in July 2018 and sent a comment letter to the project planner dated July 26, 2018 (Exhibit B).

It is important to note the previous proposal (DP18-3002) was a separate PV project with different project sponsors. The previously withdrawn project was not resubmitted in any form and is not affiliated with the proposed project currently under consideration.



Due to the project including a rezoning, a public hearing to determine consistency with the Contra Costa Airport Land Use Compatibility Plan ("ALUCP" or "Plan") would be required. The scale of the project and partial location within Byron Airport's Compatibility Zone 'A' would also have necessitated an ALUC public hearing and consistency determination. In February 2019, the project application was withdrawn due to several issues including impacts to sensitive habitat and biological resources and conflicts with the future Vasco Road/Byron Highway Connector. The ALUC did not convene to act on this project.

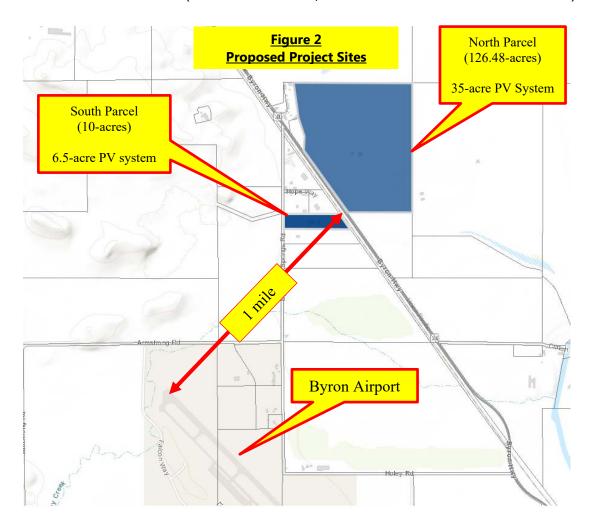
¹ Contra Costa Airport Land Use Compatibility Plan, Countywide Policy 1.5.1.

County File #LP20-2028 and #LP20-2029 (current proposed projects)

November 18, 2020, ALUC staff received a Notice of Intent to Adopt a Mitigated Negative Declaration from the County which included the California Environmental Quality Act ("CEQA") Initial Study/Mitigated Negative Declaration ("IS/MND") document and full set of project plans. At the November 2020 public meeting, the Commission instructed ALUC staff to bring the projects before the full Commission for a consistency determination on December 17, 2020. The IS/MND comment deadline is December 18, 2020.

The subject sites include (Figure 2):

- A. 10-acre site (APN 002-210-019, herein referred to as "South Parcel"), and
- B. 126.48-acre site (APN 002-210-025, herein referred to as "North Parcel").



IV. AIRPORT LAND USE COMPATIBILITY PLAN ANALYSIS

Byron Airport is southwest of the project area, approximately one mile from the end of Runway 12. Both parcels are adjacent to Byron Highway/State Route 4 ("SR-4"). The South Parcel is west of Byron Highway/SR-4 and the North Parcel is east of SR-4. Both parcels are mostly vacant except the northwest corner (approximately 800 square feet) of the South Parcel contains an existing approved (2011) telecommunications site with a 100-foot antenna tower. Land uses in the area are mainly agricultural, and light and heavy industrial. Byron Hot Springs is immediately west of the project area. The sites are accessed via Byron Hot Springs Road (South Parcel) and Rankin Road (North Parcel).

The proposed projects are generally consistent with the ALUCP and do not contain characteristics likely to result in inconsistencies with the Plan's compatibility criteria. Plan policies that affect the proposed projects are provided as follows:

- A. <u>Airport Influence Area ("AIA")</u>: The project sites are within the Airport Influence Area ("AIA") of the Byron Airport.
- B. <u>Noise Compatibility Criteria</u>: The project sites are not within any of the Byron Airport noise contours.
- C. <u>Safety Compatibility Criteria</u>: The project sites are within two of Byron Airport's Compatibility Zones ("CZ") as defined in the Plan (Figure 4B) CZ-C1 and CZ-C2 (Exhibit C). Compatibility criteria for both CZs include the following:

6.5 Compatibility Zone 'C1' Criteria

- 6.5.2. Nonresidential Development
- (a) Except as indicated in Byron Airport Policy 6.9.1, nonresidential uses within Compatibility Zone C1 shall be limited to:
 - (1) An average intensity of no more than 100 people per gross acre on the site at any time.
 - (2) A maximum intensity on any single acre (measured as a square) of no more than 300 people at any time.
 - (3) In no case shall a proposed development be designed to accommodate more than the average number of people per acre indicated in Paragraph (1) above times the gross acreage of the

project site. A project site may include multiple parcels.

- (b) Large shopping centers (500,000 or more square feet), theaters, stadiums, multistory motels or hotels with conference centers, and similar uses typically do not comply with these intensity criteria, but are acceptable if the usage is limited through building design, use permit, and/or other mechanisms.
- 6.5.3. Uses Specifically Prohibited The following uses are prohibited regardless of their usage intensity:
- (a) Children's schools.
- (b) Hospitals and nursing homes.
- 6.5.4. Height Limitations Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone C1 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing (Figure 4A).
- (a) Generally, there is no concern with regard to any object up to 100 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet taller than other nearby objects.
- (b) ALUC review is required for any proposed object taller than 100 feet.
- 6.5.5. Other Development Conditions Proposed development within Compatibility Zone C1 shall meet the following additional conditions:
- (a) Open land characteristics as described in Byron Airport Policy 6.9.4 shall be provided on at least 10% of the land within Compatibility Zone C1.
- (b) A deed notice shall be required as a condition for approval of any new residential development in this zone. See Countywide Policy 4.4.3.(b).

6.6 Compatibility Zone 'C2' Criteria

- 6.6.2. Nonresidential Development See criteria for Compatibility Zone C1.
- 6.6.3. Uses Specifically Prohibited See criteria for Compatibility Zone C1.

6.6.4. Height Limitations — See criteria for Compatibility Zone C1.

6.6.5. Other Development Conditions — See criteria for Compatibility Zone C1.

- D. <u>Airspace Protection Criteria:</u> The project sites are within Byron Airport Horizontal Surface 226' M.S.L. ("mean sea level") (150' above airport elevation of 76' M.S.L.), as shown on Figure 4A of the Plan. Proposed object heights are no higher than 8 to 10 feet (which approximates the height of the top of a PV array tilted at 0 degrees), and the PV systems will utilize existing utility poles. Based on the project area's distance from the end of the nearest Byron Airport runway (Runway 12) and elevation above mean sea level, the proposed project would not obstruct Byron Airport's protected airspace.
- E. <u>Overflight:</u> The project sites are located near Byron Airport's flight paths where the presence of frequent aircraft overflights could potentially be annoying to people on the ground. Annoyance from the presence of frequent aircraft overflights and perceived safety could be factors for concern but vary depending on the individual and therefore tend to be subjective. However, the characteristic of overflight concerns typically affect residential development, or development intending to host sensitive receptors (e.g. schools, hospitals, etc.). Therefore, based on the nature of the proposed land use, overflight should not be a compatibly concern.

V. <u>DISCUSSION</u>

Glare Impact Study (September 2020)

September 2020, glare impact studies were completed for both projects (Exhibit D). To calculate the potential for aviation hazards from glare, the projects were modeled in a glare impact analysis software program originally developed by the Federal Aviation Administration ("FAA") and United States Department of Energy ("USDOE") (Solar Glare Hazard Analysis Tool or "SGHAT"), which was later improved by a private company (ForgeSolar) and accepted by the FAA. This model uses various inputs including project and site-specific attribute data to analyze the potential for solar glare of any intensity for every minute of the year at several user-defined observation points and/or routes (Figures 3 and 4). Specifically, the analysis of the Byron Highway Solar projects assessed the final approach flight paths for the four runways at Byron Airport from 16 project site observation points.





FAA Review of Solar Energy System Projects

October 2018, the FAA and USDOE developed policy guidance for review of solar energy projects on federally obligated airports. This guidance assists local agencies in evaluating solar energy projects to ensure safety by eliminating the potential for ocular impact² to pilots and/or air traffic control facilities due to glare from such projects. For a proposed solar energy project to be deemed to have no ocular impact it must meet the following standards:

- A. No potential for glint or glare in the existing or planned Airport Traffic Control Tower ("ATCT") cab, and
- B. No potential for glare or "low potential for after-image" along the final approach path for any existing landing threshold or future landing thresholds (including any planned interim phases of the landing thresholds) as shown on the current FAA-approved Airport Layout Plan ("ALP"). The final approach path is defined as two (2) miles from fifty (50) feet above the landing threshold using a standard three (3) degree glidepath.

Per FAA guidance, ocular impact must be analyzed over the entire calendar year in one (1) minute intervals from when the sun rises above the horizon until the sun sets below the horizon³.

The analysis concluded neither project would create glare that would result in a hazard to air navigation. Also, Byron Airport does not have an existing or planned ATCT, thus resulting in no impact. The SGHAT results indicated no glare of any intensity during any minute of the year for any of the flight paths when the single-axis tracker is operating traditionally and not backtracking⁴. However, if trackers automatically backtrack to a zero-degree angle (parallel with the ground) near sunrise and sunset, then there is the possibility that during a 5-minute period near sunrise in February, March, September, and October pilots landing on Runway 12 could experience low-intensity (green) glare⁵. Similarly, there is the possibility that during a 5-minute period near sunset in part of April, May, July, and August pilots

² Ocular impact is generally defined on a plot (function of retinal irradiance and the subtended angle of the glare source) of potential hazard from solar glare ranging from "low potential" to "retinal burn/permanent eye damage."

³ U.S. Department of Transportation, FAA Review of Solar Energy System Projects on Federally Obligated Airports, Federal Register / Vol. 78, No. 205 (2013)

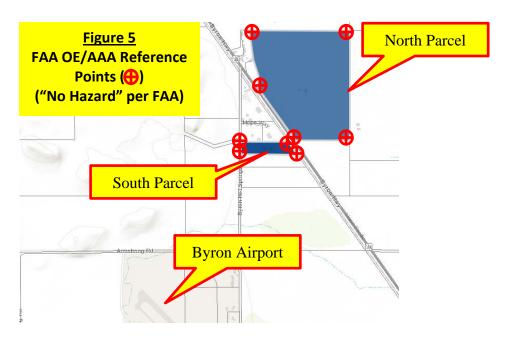
⁴ Solar backtracking is an automated tilt-control procedure to minimize PV panel-on-panel shading and thus maximize electricity production.

⁵ SGHAT software classifies solar glare in terms of ocular impact. The categories of impact are: Green Glare = low impact/low potential for after image; Yellow Glare = potential for temporary after image; Red Glare = potential to cause retinal burn (permanent eye damage).

landing on Runway 23 could experience low-intensity (green) glare during their final landing approach. It is important to note during these times of glare, the sun is close to the horizon and causing much more glare than the reflections from the PV projects. The FAA considers an unlimited amount of green glare during the final landing approach as non-hazardous.

Federal Aviation Administration Obstruction Evaluation / Airport Airspace Analysis ("OE/AAA")

October 2019, the FAA completed the OE/AAA (Exhibit E) for the proposed projects. The FAA OE/AAA used multiple reference points (corners of each parcel) for both the North Parcel (5) and South Parcel (4), thus resulting in nine total no hazard determinations (Figure 5). The determinations also did not deem marking and lighting necessary for aviation safety.



VI. CONCLUSION

The proposed project does not contain characteristics that result in inconsistencies with ALUCP compatibility criteria. Glare impact studies prepared in accordance with FAA guidance resulted in less than significant ocular hazards. Additionally, FAA OE/AAA determined the proposed projects result in no hazard to air navigation. Therefore, ALUC staff recommends the Commission find the proposed projects consistent with the Plan and approve the projects.

Airport Land Use Commission

c/o Department of Conservation & Development

30 Muir Road Martinez, CA 94553

Phone: 1-855-323-2626

Contra Costa County



John Kopchik Director

Aruna Bhat Deputy Director

Jason Crapo Deputy Director

Maureen Toms
Deputy Director

Kara Douglas Assistant Deputy Director

Kelli Zenn Business Operations Manager

December 18, 2020

Joseph Lawlor Jr, AICP, Project Planner Contra Costa County Conservation and Development Department – Current Planning Section 30 Muir Rd Martinez, CA 94553

RE: Application Review – Renewable Properties, LLC Byron Solar Projects County Files #LP20-2028 and #LP20-2029 Assessor Parcel Numbers 002-210-019 and 002-210-025

Dear Mr. Lawlor:

At the December 17, 2020 meeting of the Contra Costa Airport Land Use Commission ("ALUC" or "Commission"), the Commission unanimously approved a motion (vote: 7-0) determining the subject project is consistent with the *Contra Costa Airport Land Use Compatibility Plan* ("ALUCP").

The project was approved subject to the following condition:

1. Glare or distracting lights, which could be mistaken for airport lights, could pose a flight hazard and shall be shielded downward to ensure they do not aim above the horizon.

If you have any questions regarding the above comments, please do not hesitate to contact me at (925) 674-7832 or e-mail at jamar.stamps@dcd.cccounty.us. Thank you for the opportunity to review the proposed project.

Sincerely,

Jamar Stamps, AICP ALUC staff

cc: ALUC Commissioners Halimi, Aaron (RPCA Solar, LLC)

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1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-4282 **Agenda Date:** 10/16/2025 **Agenda #:** 4.a.

Advisory Board: Airport Land Use Commission

Subject: Oliveira Composting Facility, County File No. LP21-2042

Presenter: Jamar Stamps, AICP, ALUC staff

Contact: (925) 655-2917

BACKGROUND

This item was continued from the September 18, 2025 ALUC meeting due to lack of quorum. The September ALUC meeting staff report is attached for reference.



1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3311 Agenda Date: 8/21/2025 Agenda #: 4.a.

Advisory Board: Airport Land Use Commission

Subject: Oliveira Composting Facility

Presenter: Jamar Stamps, AICP, ALUC staff

Contact: (925) 655-2917

PROJECT SUMMARY

December 2021, the Proposed Project came before the Airport Land Use Commission ("ALUC") for an Airport Land Use Compatibility Plan ("ALUCP" or "Plan") consistency determination. The December 2021 ALUC staff report is provided as Exhibit A for reference.

The applicant requested ALUC review and determination of consistency with the Plan for a proposed (currently operating) green material composting business ("Oliveira Enterprises, Inc." or "Proposed Project").

According to the Proposed Project description (Exhibit B), the facility is not open to the public and does not accept unscheduled deliveries. The facility accepts source-separated green material from customers that it hauls from as well as some commercial accounts that deliver contracted green material. Oliveira's unique processing method involves allowing cattle to feed on green waste prior to processing it into compost. Once the cattle are done, the remaining material is processed using a standard windrow composting method. The resulting compost is sold to local

horticultural and agricultural uses.

The Proposed Project site is on approximately 30-acres of a 40.61-acre site (two parcels of 20.25-acres (001-041-057) and 20.36-acres (001-041-058)) and is located at 124 & 136 Bethany Lane, off Bruns Road, just south of Byron Highway in unincorporated Byron in Contra Costa County ("County"). Proposed project plans are provided in Exhibit A.

RECOMMENDATION

APPROVE the proposed project per the following condition:

1. Glare or distracting lights, which could be mistaken for airport lights, could pose a flight hazard and shall be shielded downward to ensure they do not aim above the horizon.

BACKGROUND

ALUC staff presented the Proposed Project at the December 2021 ALUC meeting with a recommendation for approval with the condition glare or distracting lights, which could be mistaken for airport lights, be shielded

File #: 25-3311 Agenda Date: 8/21/2025 Agenda #: 4.a.

downward.

During the ALUC's discussion, Commissioners were mainly concerned with the Federal Aviation Administration ("FAA") Obstruction Evaluation/Airport Airspace Analysis ("OE/AAA"). Specifically, whether the Proposed Project would be compatible with the current area navigation ("RNAV") Global Positioning System ("GPS") for Byron Airport's Runway 30 approach. The Commission ultimately decided to continue the item until the FAA returned an OE/AAA determination of no hazard to air navigation. ALUC staff transmitted this request in a letter dated December 17, 2021 (Exhibit C).

December 2022, the FAA returned a determination of no hazard to air navigation (Exhibit D) which was received by the County Department of Conservation and Development on August 31, 2023 (received by ALUC staff on July 8, 2025). The FAA OE/AAA includes review by several FAA divisions, including the Flight Procedures Division. As such, it can be concluded that this no hazard determination confirms the Proposed Project does not affect any current instrument flight procedures (approaches or departures), i.e., RNAV.

CONCLUSION

The Proposed Project does not contain characteristics that result in or have the potential to result in inconsistencies with ALUCP compatibility criteria. Therefore, ALUC staff recommends the Commission find the Proposed Project consistent with the Plan and approve the Project.



Department of Conservation and Development

Airport Land Use Commission

Thursday, December 16, 2021 – 7:00 P.M.

STAFF REPORT Agenda Item # <u>5.a.</u>

Project Title: Oliveira Composting Facility

ALUC File #: County File #LP21-2042

Lead Agency: Contra Costa County

Applicant/Owner: Brian Oliveira/Carlos Oliveira

Site Address/Location: 124 and 136 Bethany Lane, Byron, CA

Assessor's Parcel Number: 001-041-057/058

Staff Recommendation(s): APPROVE with condition(s)

List of Exhibits: Exhibit A: Proposed Project Plans/Project Description

Exhibit B: ALUC Comment Letter (11/23/21)

Staff Contact: Jamar Stamps, AICP, (925) 655-2917

I. PROJECT SUMMARY

The applicant requests Airport Land Use Commission ("ALUC") review and determination of consistency with the *Contra Costa Airport Land Use Compatibility Plan* ("Plan") for a proposed (currently operating) green material composting business ("Oliveira Enterprises, Inc." or "Proposed Project").

According to the Proposed Project description, the facility is not open to the public and does not accept unscheduled deliveries. The facility accepts source-separated green material from customers that it hauls from as well as some commercial accounts that deliver contracted green material. Oliveira's unique processing method involves allowing cattle to feed on the green waste prior to processing it into compost. Once the cattle are done, the remaining material is processed using a standard windrow composting method¹. The resulting compost is sold to local horticultural and agricultural uses.

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¹ Windrow Composting: This type of composting involves forming organic waste into rows of long piles called "windrows" and aerating them periodically by either manually or mechanically turning the piles. The ideal pile height is between four and eight feet with a width of 14 to 16 feet. (www.epa.gov)

The Proposed Project site is on approximately 30-acres of a 40.61-acre site (two parcels of 20.25-acres (001-041-057) and 20.36-acres (001-041-058)) and is located at 124 & 136 Bethany Lane, off Bruns Road, just south of Byron Highway in unincorporated Byron in Contra Costa County ("County"). Proposed project plans are provided in Exhibit A.

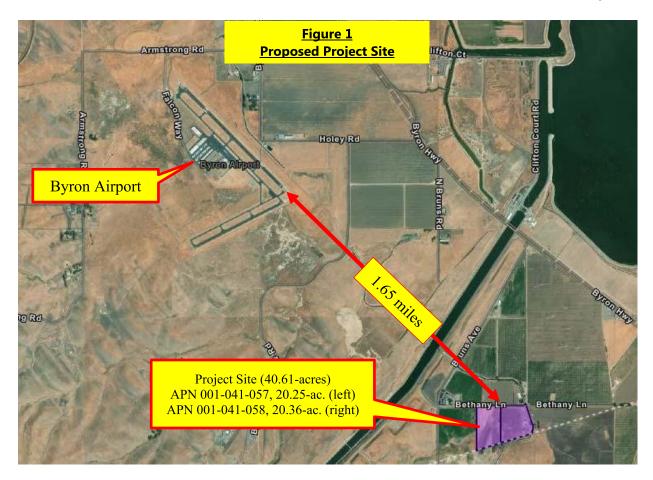
II. RECOMMENDATION

APPROVE the proposed project per the following condition:

A. Glare or distracting lights, which could be mistaken for airport lights, could pose a flight hazard and shall be shielded downward to ensure they do not aim above the horizon.

III. BACKGROUND

October 28, 2021, ALUC staff received a referral for the Proposed Project from the Contra Costa County Department of Conservation and Development. The referral contained the project application and set of proposed plans dated October 4, 2021. ALUC staff sent written comments to the project planner (Exhibit B) dated November 23, 2021, indicating the Proposed Project does not contain characteristics likely to result in inconsistencies with Byron Airport compatibility criteria and finds the project consistent with the Plan. However, vector control has been a specific concern of the ALUC for similar projects in the past and are evaluated on a case-by-case basis. The Proposed Project site is shown in Figure 1:



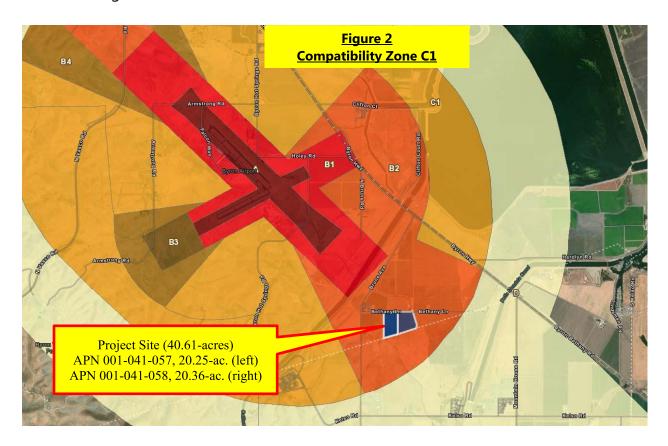
IV. AIRPORT LAND USE COMPATIBILITY PLAN ANALYSIS

Byron Airport is northwest of the Proposed Project site, approximately 1.65-miles from the end of Runway 30, near the southern aqueduct of Clifton Court Forebay. The Proposed Project site is currently operating (opened 1999) as a green material composting business and land uses in the area are primarily agricultural. The site is accessed via Bruns Road from Byron Highway.

The Proposed Project is generally consistent with the ALUCP and does not contain characteristics likely to result in inconsistencies with the Plan's compatibility criteria. Plan policies that affect the Proposed Project are provided as follows:

- A. <u>Airport Influence Area ("AIA")</u>: The project site is within the Airport Influence Area ("AIA") of the Byron Airport.
- B. <u>Noise Compatibility Criteria</u>: The project site is not within any of the Byron Airport noise contours.

C. <u>Safety Compatibility Criteria</u>: The project site is within Byron Airport's Compatibility Zone B2 ("CZ-B2"), as defined in Figure 4B of the Plan and shown in Figure 2 below.



Compatibility criteria for CZ-B2 includes the following:

6.5 Compatibility Zone 'B2' Criteria

6.4.2. Nonresidential Development

- (a) Except as indicated in Byron Airport Policy 6.9.1, nonresidential uses within Compatibility Zone B2 shall be limited to:
 - (1) An average intensity of no more than 50 people per gross acre on the site at any time.
 - (2) A maximum intensity on any single acre (measured as a square) of no more than 100 people at any time.
 - (3) In no case shall a proposed development be designed to

- accommodate more than the average number of people per acre indicated in Paragraph (1) above times the gross acreage of the project site. A project site may include multiple parcels.
- (b) Fast-food establishments, large shopping centers (500,000 or more square feet), theaters, motels, and similar uses typically do not comply with these intensity criteria, but are acceptable if the usage is limited through building design, use permit, and/or other mechanisms.
- 6.4.3. Uses Specifically Prohibited The following uses are prohibited regardless of their usage intensity:
 - (a) Children's schools and day care centers.
 - (b) Hospitals and nursing homes.
 - (c) Aboveground bulk storage of hazardous materials with the exception of:
 - (1) On-airport storage of aviation fuel and other aviation-related flammable materials.
 - (2) Up to 2,000 gallons of nonaviation flammable materials.
 - (d) Highly noise-sensitive uses (for example, outdoor theaters).
- 6.4.4. Height Limitations Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone B2 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing (Figure 4A).
 - (a) Generally, there is no concern with regard to any object up to 70 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet taller than other nearby objects.
 - (b) ALUC review is required for any proposed object taller than 70 feet.
- 6.4.5. Other Development Conditions Proposed development within

Compatibility Zone B2 shall meet the following additional conditions:

- (a) Open land characteristics as described in Byron Airport Policy 6.9.4 shall be provided on at least 20% of the land within Compatibility Zone B2.
- (b) A deed notice shall be required as a condition for approval of any development in this zone. See Countywide Policy 4.4.3.(b)

Based on the size of the Proposed Project site (40.61-acres) and the facility not being open to the public, it is highly unlikely the operation would exceed density limits. The Proposed Project description indicates the facility would have approximately 78 trucks per day accessing the site delivering feedstock…truck trips are estimated at 30 trucks per day removing finished products and 30 vehicles per day for employees and deliveries. This likely projects to approximately fifteen (15) to twenty-five (25) employees (including deliveries) during any given operating hour (6:00 a.m.-4:00 p.m.). Therefore, the Proposed Project would not conflict with the Byron Airport safety policies. The Proposed Project also complies with Plan Section 6.5.5.(a) – Open Land Criteria.

- D. <u>Airspace Protection Criteria:</u> Figure 4A of the Plan indicates the project site is within Byron Airport's Airspace Protection Surface *Approach Surface 50:1.* Based on the Proposed Project description, and the project site's distance (1.65-miles) from Byron Airport's closest runway (Runway 12/30), Byron Airport's protected airspace would not be impacted due to proposed object heights. Glare or distracting lights (which could be mistaken for airport lights) could pose a flight hazard and should always be avoided. There are no specific Federal Aviation Administration or ALUC standards for this type of hazard as they are evaluated on a case-by-case basis. In any case, the Proposed Project should shield outdoor lights (permanent or temporary/construction related) downward to ensure they do not aim above the horizon.
- E. Overflight: The Proposed Project site is located near Byron Airport flight paths or under traffic patterns where the presence of frequent aircraft overflights could potentially be annoying to people on the ground. Even in locations not subject to high cumulative noise levels, annoyance from the presence of frequent aircraft overflights and perceived safety could be factors for concern but vary depending on the individual and therefore tend to be subjective. Given the characteristics of the Proposed Project, overflight should not be a compatibly concern.

V. DISCUSSION

Based on reviewing the information provided, ALUC staff has determined that the Proposed Project does not contain characteristics likely to result in inconsistencies with Byron ALUCP compatibility criteria and finds the project consistent with the Plan. There are no proposed densities, building occupancies or structure heights that would conflict with ALUCP safety and airspace protection policies. However, vector control has been a specific concern of the ALUC for similar projects in the past and are evaluated on a case-by-case basis.

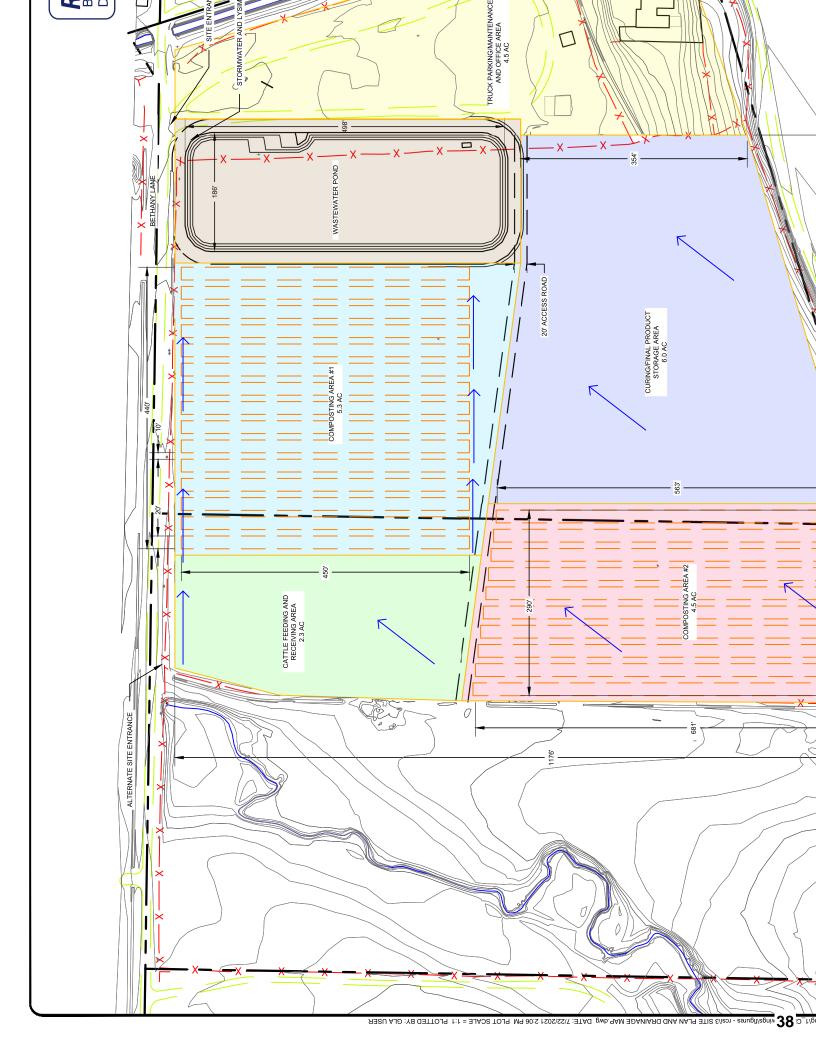
According to the Proposed Project description, the facility is being permitted for a maximum (peak daily flow) of 2,500 cubic yards per day of incoming feedstocks. The average delivery is approximately 32 cubic yards. In practice daily incoming flows will be lower than this, but this volume will allow for seasonal fluctuations. The capacity of the site (in total material on-site at any one time) is estimated at 182,000 cubic yards. At the maximum, peak flow of 2,500 cubic yards per day, the facility would have approximately 78 trucks per day accessing the site delivering feedstock. This amount of organic material could be attractive for vector or wildlife.

The Proposed Project description indicates vectors, such as birds, rodents, and insects, have not posed significant problems to date at the facility. However, standing water from the water truck (dust control) could become a fly or mosquito attractant. Any standing water will be absorbed using processed green material as an absorbent. Water in the stormwater retention pond will be monitored for fly and mosquito activity. If the pond attracts vectors, Oliveira will contract with a pest control company.

Areas around the Proposed Project site and between Byron Airport are generally agricultural and potentially contain wildlife attractants, including the Clifton Court Forebay, thus making the Proposed Project's attractiveness to vector and wildlife far less acute. With the Proposed Project site's vector monitoring and distance (1.65-miles) from the nearest Byron Airport runway, wildlife interference with aircraft in flight should not be a concern.

VI. CONCLUSION

The Proposed Project does not contain characteristics that result in or have the potential to result in inconsistencies with ALUCP compatibility criteria. Therefore, ALUC staff recommends the Commission find the Proposed Project consistent with the Plan and approve the Project.



A. Project Overview

Since 1999 Oliveira Enterprises, Inc. (Oliveira) has operated a green material composting business on a 50-acre site located off of Bruns Road, south of Byron in the Unincorporated portion of Contra Costa County. The facility is not open to the public and does not accept unscheduled deliveries. The facility accepts source-separated green material from customers that it hauls from as well as some commercial accounts that deliver contracted green material. Oliveira's unique processing method involves allowing cattle to feed on the green waste prior to processing it into compost. Once the cattle are done, the remaining material is processed using a standard windrow composting method. The resulting compost is sold to local horticultural and agricultural uses.

B. Project Location and Access

The site is located at 124 & 136 Bethany Lane, off of Bruns Road, just south of Byron Highway. Vehicles access the site via either northbound or southbound Bruns Road and turn onto Bethany Lane and proceed via internal company roads. Most of the feedstock delivery vehicles are Oliveira's own trucks. These trucks contain an average of 32 cubic yards of material. At full capacity (2,500 cubic yards) there would be approximately 78 trucks accessing the site. At the same time, an average of 30 vehicles removing finished compost will also be accessing the site. In addition there may be as many as 30 vehicles per day including employees, deliveries, regulatory visits, etc. So total traffic at the site, at full capacity is estimated at 138 vehicles per day.

C. Surrounding Land Use

The surrounding land use is dominated by open, undeveloped grazing land. The Byron-Bethany Irrigation District (BBID) operates an administration office to the west. A canal feeding the Clifton Court Forebay (a key part of the State Water Project) runs to the west and north of the site. A smaller canal (operated by BBID) encircles the site on the north, east and south. To the east of the composting facility is open, undeveloped grazing and agricultural land. To the south is also largely undeveloped grazing and agricultural land. To the west is the undeveloped grazing and agricultural lands interrupted by the larger canal.

The majority of the adjacent properties are zoned for agriculture. The properties owned by BBID, and the canals, are zoned for public, semi-public use.

D. Days and Hours of Operation

Because the facility operates a trucking operation in addition to the composting business, the business functions 24 hours per day/7 days per week. The administration of the facility is operated from 6:00 am to 4:00 pm, Monday through Saturday. The facility is not open to the public and does not accept unscheduled deliveries. Customers do not access the facility (for compost) until 7:00 am. Customers are pre-approved wholesale buyers of compost, mulch, or other products.

E. Permits and Approvals

Several permits and approvals govern the design and operation of the composting facility. These include:

- 1. Forthcoming approval from Contra Costa County, Department of Conservation and Development (DCD).
- 2. Forthcoming CEQA analysis from Contra Costa County Department of Conservation and Development (DCD).
- 3. Solid Waste Facility Permit, Contra Costa County Environmental Health Division. (in Process)
- 4. Compliance with SWRCB General Order, Technical Report, April 2021
- 5. Contra Costa County Integrated Waste Management Plan, Non Disposal Facility Element, Amendment #___, <Month> 20__.

Section 2 REPORT OF COMPOSTING SITE INFORMATION

14CCR, Section 18227 contains the requirements for the Report of Composting Site Information (RCSI). The information in this RCSI describes the design and operation of Oliveira Enterprises, Inc., a green material composting facility.

A. Process Description

(a) A description of the processes to be used, including estimated quantities of feedstocks, additives, and amendments.

Oliveira Enterprises, Inc. (Oliveira) uses a turned windrow method of composting. Ninety percent of all feedstocks received are hauled by Oliveira via company-owned roll off trucks. Remaining feedstocks are delivered by select commercial haulers. Customers include commercial landscaping companies throughout the Bay Area and Central Valley.

Oliveira uses a unique pre-processing system, which includes feeding a portion of incoming green waste to cattle. The company also raises cattle on adjacent properties. Because the feedstock is used for cattle feed, all materials are carefully inspected for cleanliness at the generator's location. There can be no more than 1% of trash, sod, cement, pressure-treated lumber, or dirt.

The facility is being permitted for a maximum (peak daily flow) of 2,500 cubic yards per day of incoming feedstocks. In practice daily incoming flows will be lower than this, but this volume will allow for seasonal fluctuations. The capacity of the site (in total material on-site at any one time) is estimated at 182,000 cubic yards. Calculations and assumptions documenting the capacity to manage this volume is contained in Table 2-4, (Appendix A). Market choices, management intensity, pile heights, and retention times can affect capacity significantly.

B. Descriptive Statement of Operations

(b) A descriptive statement of the operations conducted at the facility.

Delivery vehicles enter the site from either northbound or southbound Bruns Road and then access Bethany Lane and proceed via internal site roads. Much of the feedstock is collected by Oliveira's trucking business and customers are trained and educated as to what is and is not acceptable in the bins. The facility does not have a scale, but charges incoming customers based on the hauling cost plus the volume of material (based on truck size). The average delivery is approximately 32 cubic yards. At the maximum, peak flow of 2,500 cubic yards per day, the facility would have approximately 78 trucks per day accessing the site delivering feedstock. The site also accommodates employee vehicles and trucks delivering finished compost off-site. These truck trips are estimated at 30 trucks per day removing finished products and 30 vehicles per day for

employees and deliveries. Thus, on a peak day the site might need to accommodate 138 vehicle trips per day. The site is not open to the public, nor does it accept unscheduled deliveries.

Load Checking. All the feedstocks processed by Oliveira are source-separated, thereby greatly reducing the possibilities of major amounts of contaminants. All loads are given a visual load check when they are first collected at the site of the generator. Loads are further evaluated as they are dumped at the site and inspected by Oliveira staff.

Any contaminants identified while unloading the incoming materials are removed manually and disposed of on-site in 40 cubic yard roll-off bins that are emptied at a minimum of once per week, or more frequently as necessary. All loads of non-processables are delivered to a permitted solid waste disposal facility (typically the Fink Road Landfill).

Title 14 §17868.5 (a)(1) describes green material processing requirements and requires that incoming green material feedstocks undergo load checking to ensure that physical contaminants are no greater than 1.0 percent of total weight:

"A minimum of ten percent of daily incoming feedstock volume or at least one truck per day, whichever is greater, shall be inspected visually. If a visual load check indicates a physical contamination level greater than 1.0 percent, a representative sample shall be taken, physical contaminants shall be collected and weighed, and the percentage of physical contaminants determined. The load shall be rejected if physical contaminants are greater than 1.0 percent of total weight or if the load contains materials that do not meet the definitions of green material in section 17852(a)(21) or vegetative food material in section 17852(a)(20)(A)."

Contaminants in the green material feedstock may not exceed one percent of the incoming green material received on a given operating day. Oliveira complies with this requirement by removing and segregating all contaminants from the incoming green material loads.

Unprocessed Material Receiving. Unprocessed green materials are delivered to the Cattle Feeding and Receiving Area (2.3 acres). The dimensions of the Cattle Feeding and Receiving Area are listed in Table 2-3. Capacity calculations are shown in Table 2-4 (Appendix A).

Cattle Feeding. The unloaded green materials are spread out so that the cattle can have access to the materials. The cattle typically spend 24 to 48 hours consuming delivered green material. Although it is not measured, it is estimated that the cattle consume 50 - 70% of the incoming green materials. The dimensions of the Cattle Feeding and Receiving Area are listed in Table 2-3 (Appendix A). Capacity calculations are shown in Table 2-4. (Appendix A).

Green Material Processing Area. Once the cattle have consumed what they will, the material is pushed up into a stockpile for grinding. Materials are unloaded in the processing area. A large grinder is used to size reduce the materials. Grinding of the feedstock reduces the volume of material and provides a uniform mixture of material and particle size. Ground materials are loaded directly into windrows for composting. The dimensions of the Green Material Processing Area are listed in Table 2-3 (Appendix A). Capacity calculations are shown in Table 2-4 (Appendix A).

In the event of an equipment breakdown or other unforeseeable circumstance that would prevent the processing of green waste within 72 hours, material may be stockpiled for no more than seven days. If the site cannot process (i.e., grind) feedstock within the required time frame, the material will be transferred to another facility for composting or beneficial reuse, or ither permitted facility. It is more likely however, in the event of a breakdown of both grinders, the facility would rent a replacement grinder of similar capacity from nearby contractors while repairs were being made.

Composting Area

The entire Oliveira property is approximately 50 acres, the compost manufacturing area comprises approximately 30 acres. Following chipping and grinding, the readied compost feedstock will be a uniform mixture. The initial density of the compost mix is assumed to be 0.35-0.45 tons per cubic yard. Water will be added to the material initially, as necessary, to achieve the targeted moisture content of between 40-60%. The actual amount of water added will vary seasonally, but will be maintained within an acceptable range (40-60%). The moisture content levels will be monitored daily. Typically Oliveira measures moisture content using the squeeze test to estimate moisture.

Windrow Composting. Historically the facility has used a simple windrow composting method. Processed material is placed into windrows and water is added via a water truck. Rows of processed green material may be as large as 10 feet high and 20 feet wide at the base, at least initially (windrows generally shrink as the composting process proceeds). The material is turned as needed using a specialized windrow turner. Windrow length depends on the physical limitations of the site, but will not extend beyond a maximum of 750 feet long.

The material will compost in the windrows for an eight to 12-week period. The compost would then mature in curing piles for a minimum length of at least four weeks. The mechanically turned windrows could hold compost for up to 6 months depending on the inflow rate and storage capacity. If residence time in a windrow exceeded 6 months, the compost would be screened and the finished compost stockpiled for testing and eventual off-site sale. The residual compost "overs" are stockpiled for a maximum of six months (especially if it is to be applied to adjacent

agricultural fields) and then removed to an approved disposal facility for beneficial reuse as ADC, or applied to agricultural land for beneficial reuse.

All compost will complete the two-step Process to Further Reduce Pathogens (PFRP). Once temperatures in the windrows have exceeded 131° F, temperatures are documented in the pathogen reduction log. At least one temperature reading is taken per 150 feet of windrow. After 3 daily consecutive temperature readings of above 131° F, the piles are turned. This process continues until the pile has been turned 5 times, while continuing to exceed 131° F for a minimum 15 day period (because of weekends, the PFRP process may take 19 or more consecutive days). The second step in the PFRP process involves taking a random and representative sample of compost per 5,000 cubic yards for laboratory analysis. The lab test will verify that the time/temperature process described above, resulted in pathogen indicator organisms below the regulated threshold (Please refer to the discussion on Monitoring and Testing, below).

Aerated Static Pile Composting. If required by regulatory agencies, Oliveira may develop the capacity to compost some (or all) of its feedstock via an Aerated Static Pile (ASP) composting system. ASP composting is fundamentally similar to the existing windrow system, except instead of periodically turning a windrow to re-establish porosity for natural convection, an ASP system uses fans to introduce oxygen to the piles of composting material.

The ASP system, while not designed, if needed, will likely be a relatively simple, positively-aerated, pipe-on-grade system. If ASP composting is implemented, it is likely to provide a "first stage" of composting, followed by windrow composting (described above) for additional composting and/or curing. The use of an ASP system would decrease compost residence time, so would not require any more space than is currently occupied by compost windrows.

The area where the ASP would be located would be compacted (with soil and/or gravel) as necessary to support the system. The ASP system would be a simple, pipe-on-grade system with small electrical fans providing periodic aeration to a series of horizontal, perforated HDPE pipes. Prepared feedstocks would be placed on top of the HDPE pipes. Once placed, the fans would provide aeration to the piles using a simple control system based on temperature feedback. The fans would be protected by low concrete blocks. The fans would be electrically-powered. The capacity of the ASP system will be calculated when it is designed, but it will include a modular approach so that it can be expanded as necessary. Aeration rates will be calculated to provide sufficient aeration to meet process and regulatory agency goals. The facility will place a "cap" of unscreened finished compost on top of each newly constructed ASP pile to serve as an insulating biolayer. The "cap" serves a number of purposes. It provides an insulating layer to help assure completion of the PFRP process (see below). It has also been shown to reduce VOC emissions

when properly moisturized and placed above ASP piles¹. After a prescribed period of time (typically 21 to 30 days), the ASP piles would be broken down and the material would be moved to the windrow area for further composting and/or curing.

ASP achieves pathogen reduction in a shorter timeframe. ASPs are required to hold the pile temperature at or above 131° F for three days and there is no turning. It is assumed that there is an insulating layer on top to help assure that the mass of compost is exposed to three days at or above 131° F. If Oliveira develops an ASP system, it is likely that PFRP will be achieved and documented in the ASP piles and not in the windrows, though the windrows will also likely regularly achieve temperatures in excess of 131° F.

ASP piles are typically 8 feet high or less. Pipe spacing is generally equal to ½ the height of the piles. Individual piles may also be "extended" such that each lateral pile touches its immediate neighbor and so on, forming somewhat of a mass bed, though piles will still be managed individually. Pipe length is generally less than 80 feet. Implementing an ASP system will increase the capacity of the facility, by reducing material retention time, thus, it will not require any additional space.

Curing Area. After composting (whether windrow, ASP or a mix of the two technologies) is complete and the piles have achieved PFRP in accordance with 14 CCR regulations, the piles are broken down and moved into curing piles. Curing piles allow for the compost to further mature and increase in quality after pathogen reduction is complete in the active phase. To allow for final product stabilization and maturation, the compost will typically stay in the curing piles for a minimum of four weeks and a maximum of 3 months. The duration in curing allows for adequate time for the final stabilization and maturation of the compost to occur resulting in a consistent, high quality compost product. The end-use of the compost will dictate the necessary degree of maturation of the material (e.g., some end-users do not require a fully mature product).

The curing piles are constructed to a maximum height of up to 15 feet and from 15 to 30 feet wide. To be clear, for the purposes of estimating site capacity (in Table 2-4, Appendix A) piles were assumed to be 10 feet. However, in practice, piles may be as high as 15 feet, as the curing material has a lower oxygen demand as the windrows and/or ASP piles. The length of the piles will depend on the available space but are typically less than 300 feet long.

Curing piles are constructed using a loader and to ensure highly compacted "dead zones" are not created. It is common for temperatures to increase when first placed in the curing pile as air is reintroduced to the system. This aids in further maturation of the material.

2-5

¹ "Green Waste Compost Emissions Reductions from Solar-powered Aeration and Biofilter", SJVAPCD May 2013.

A minimum spacing of 15 feet between curing piles will be maintained to allow for fire department access (unless otherwise dictated by the fire department). If temperatures are above 170°F during monitoring, corrective action measures will be used to lower and manage temperatures to an acceptable level.

Monitoring and Testing. The goal of the composting operation is to prepare useable, marketable compost end products. To assure the quality of the end products, several quality control and process monitoring procedures are be conducted.

Materials in different stages of the composting process (feedstock, active, curing, and finished) will be stored separately to avoid potential cross-contamination between materials that have and have not completed PFRP.

The Facility will submit a composite sample for laboratory analysis for pathogen reduction, metal concentrations, and physical contamination per Sections 17868.1, 17868.2, and 17868.3. These are summarized in Table 2-1 (Appendix A). Per Article 7, Section 17868.1, one representative and random composite sample will be collected per 5,000 cubic yards of compost produced and sent to a state certified laboratory for analysis. Analytical limits are shown in Table 2-2 (Appendix A).

Oliveira will follow the required sampling protocol from Title 14 (§17868.1) when collecting samples for lab analysis:

- "A composite sample shall be representative and random, and may be obtained by taking twelve (12) mixed samples as described below.
- (I) The twelve samples shall be of equal volume.
- (2) The twelve samples shall be extracted from within the compost pile as follows:
- (A) Four samples from one-half the width of the pile, each at a different cross-section;
- (B) Four samples from one-fourth the width of the pile, each at a different cross-section; and,
- (C) Four samples from one-eighth the width of the pile, each at a different cross-section."

Maximum acceptable pathogen concentrations will be confirmed through analysis for density of fecal coliform and density of Salmonella sp. bacteria. The density of fecal coliform in compost shall be less than 1,000 Most Probable Number (MPN) per gram of total solids (dry weight basis), and the density of Salmonella sp. bacteria in compost shall be less than three MPN per four grams of total solids (dry weight basis).

Compost will not be removed from the facility until after test results are received confirming the materials have met the maximum acceptable metal concentrations the pathogen reduction requirements, and the physical contamination requirements. If materials do not meet these requirements it shall be designated for additional processing, disposal, or other use as approved.

Table 2-2 (Appendix A) summarizes required analytical testing. Finished compost is tested in accordance with the requirements of 14 CFR §17868.2,17868.3, and §17868.3.1. Copies of all test results and monitoring activities are kept at the facility's administration office for inspection by the LEA and other regulatory agencies. Additional monitoring will be provided in compliance with Title 14 requirements and as required by the LEA.

Windrow temperatures are monitored daily during the pathogen reduction period (§17868.3(c)). At least one temperature reading will be taken per every 150 feet of windrow. A minimum stabilized temperature of not less than 55° Celsius (131° Fahrenheit) is maintained for a minimum of 15 consecutive days. Hand-held temperature probes are used to monitor temperatures. A composite sample of the finished compost product will be taken per every 5,000 cubic yards produced to ensure it meets the maximum acceptable metal concentration limits specified in California Code of Regulations (CCR) Title 14, Section 17868.2, pathogen reduction requirements specified in CCR title 14, Section 17858.3., and the physical contaminants limits specified in CCR Title 14 Section 17868.3.1

Pathogen Reduction/Metals/Physical Contamination Sampling

In the event that any future analysis of pathogen indicators, heavy metals, or physical contaminants returns a result in excess of regulated limits, Oliveira will follow the following protocol:

- I. The material will be retained on-site, the LEA will be informed, and a new, random, composite sample will be taken and submitted for analysis to confirm the previous results.
- 2. If a resample and/or a re-test continues to return elevated pathogen, metals, or physical contaminant numbers, an investigation will be initiated to determine the cause and mitigation measures would be developed.
- 3. During the investigation, the parent material that was sampled will be isolated pending the results of the analysis.
- 4. If the re-sample confirms numbers in excess of regulated limits the facility will, in consultation with the LEA, either:
 - a. Compost the material in an active windrow (following the traditional time/temperature relationship described above) to ensure pathogen reduction; and then re-test the material to ensure that it is now within regulatory limits prior to sale or use, or, if not:

- b. Find an approved use for the material such as use as alternative landfill cover; or
- c. Arrange for permitted disposal of the material.

In the event that compost windrows do not remain at or above 131° F for the 15 days/5 turns as required by Section 17868.3, the operator will inform the LEA and either extend the pathogen reduction process until the temperature requirements are met or will re-form the windrows and repeat the pathogen reduction process, ensuring that the requirements of Section 17868.3 are met.

C. Facility Layout and Dimensions

(c) A schematic drawing of the facility showing layout and general dimensions of all processes utilized in the production of compost including, but not limited to, unloading, storage, processing, parking, and unloading areas.

A Site Location Map is included in Appendix C as Figure 1. Figure 2 shows the property boundaries and surrounding land uses. A detailed Site Plan is included in Appendix C as Figure 3. Figure 4 shows general traffic flow. The Site Plans show key dimensions of the site, the access roads, and two "Composting Areas". These areas will accommodate windrows, aerated static piles, or a combination of both. Table 2.3 summarizes dimensions of the various processing locations (please see Appendix A). There are approximately 9.8 acres of available compost processing area. Ample parking for all employees and visitors is available in the truck parking and office area. Incoming green material is unloaded at the Cattle Feeding and Unloading Area.

D. Nuisance and Public Health Controls

(d) A description of the proposed methods used to control leachate, litter, odors, dust, rodents, and insects, for example, how the operator will store, process and incorporate food material and vegetative food material into windrows or static piles, timeframes for inclusion of material, collection and containment of leachate, passive and active vector controls, methods to monitor effectiveness of control measures.

Leachate Control. Leachate (free liquid emanating from within the composting piles or from stored feedstock) may occur during wet periods or if the piles have been saturated with moisture. Watering the piles only enough to provide adequate moisture within the compost piles minimizes leachate creation. Composting uses a lot of water, so it is likely that there will be few times when there is too much water present in the windrows, the opposite is usually true. Limiting moisture addition to the storage piles to just enough for dust control will also minimize leachate. Contact with the public is minimized since the site is not open to the public and does not accept unscheduled deliveries. If any piles are found to be generating leachate, free liquid will be absorbed with chipped green material, scooped up and added to the appropriate pile. Watering schedules

will be adjusted accordingly to minimize added water. The site is graded and designed so that all water on the site flows to the stormwater retention pond (See Figure 3, Appendix c.)

Litter Control. Because the Facility only accepts pre-screened, source-separated feedstocks, litter generation at the site is minimal. Litter control measures built-in to facility design include:

- Minimization of acceptance of litter-rich feedstocks.
- Daily patrolling of aisles, processing areas, access roads, and the site perimeter to remove accumulated litter.
- Daily patrolling of those areas where litter fencing has been installed [the facility will install
 litter fencing (and/or redundant fencing) in areas where it is deemed necessary in
 consultation with the LEA].
- Adjacent properties will be patrolled daily to check for blowing litter. Any accumulated litter will be removed and placed in a bin for eventual disposal at a permitted facility.

Odor Control. The facility has developed and maintains a site-specific Odor Impact Minimization Plan (OIMP) for the compost operation. The OIMP is maintained at the Facility Administration office. The OIMP contains site-specific management practices and standard operating procedures for minimizing off-site odors from the compost facility. The current OIMP is contained in Appendix D. OIMP activities include daily on and off-site patrolling/monitoring for odors from the site, preventing odorous materials from entering the site, preventing anaerobic conditions, removing material in a timely manner, and following Best Management Practices for composting.

Dust Control. Potential dust emissions from the facility are from the grinding, screening, and windrow turning, loading and unloading of trucks, and from road traffic. The facility access roads are watered several times daily as needed to minimize dust. The windrows are watered to maintain adequate moisture content. Two 3,500-gallon water trucks also provide dust control at the site. Dust from incoming vehicles will be minimized by periodic watering of on-site roads and aisles. Material screening is scheduled with the intent to minimize dust creation and dispersal. Oliveira monitors weather conditions and uses these to guide daily operations. To further control dust, Oliveira suspends all material handling activities when wind speeds consistently exceed 15 miles per hour (or gusts are in excess of 25 miles per hour). The primary means of dust control is the water trucks, which patrol the site daily during processing operations. Water is primarily sprayed on roads, but will also be sprayed on the grinder or on the windrows during turning. Additional dust control measures will be developed if warranted.

Noise Control. Noise is controlled through the proper use and maintenance of mufflers on equipment, both stationary and mobile. The largest source of noise on-site is the grinder. The nearest residence is approximately one-half mile from the grinder. The grinder noise will attenuate over distance and is also buffered by large piles of stockpiled organic materials.

Vector Control. Vectors, such as birds, rodents, and insects, have not posed significant problems to date at the facility. However, standing water from the water truck could become a fly or mosquito attractant. Any standing water will be absorbed using processed green material as an absorbent. Over-watering will be minimized to reduce the possibility of standing water. Water in the stormwater retention pond will be monitored for fly and mosquito activity. If the pond attracts vectors, Oliveira will contract with a pest control company to provide mitigations. It is expected that water from the pond will be used for dust control and process water early in the composting process (ahead of PFRP). It is further expected that the pond will be dry most of the year.

Pathogenic Organisms/Bioaerosols. Aspergillus Fumigatus is the most common bioaerosol associated with composting operations, though it is commonly found in many situations. Existing research on Aspergillus Fumigatus has established that it is a ubiquitous fungus to which people are exposed on a regular basis without causing illness or disease. The former CIWMB issued an LEA Advisory entitled "Aspergillus, Aspergillosis, and Composting Operations in California" (LEA Advisory No. 6, December 16, 1993). This technical bulletin addressed many of the commonly asked questions about Aspergillus Fumigatus and potential health effects, as well as presented the best management practices (BMPs) for composting operations to reduce the potential for exposure and distribution of Aspergillus spores.

Subsequent to that report, the California Department of Health Services, Division of Environmental and Occupational Disease Control, Environmental Health Investigations Branch prepared a report called "Bioaerosols and Green Waste Composting in California", (June, 1999). This report concluded that "No significant new or insightful information concerning the relationship of Aspergillus Fumigatus to health effects has been published since Technical Bulletin No.1, "Aspergillus, Aspergillosis, and Composting Operations in California". The report clarified the earlier findings and provided more up-to-date citations. The report concluded that healthy individuals are at minimal risk for infection from Aspergillus, regardless of exposure, and individuals with lung damage are susceptible to Aspergillus infection from any source, not specifically from composting.

In general, minimizing dust reduces the potential for Aspergillus transport. Oliveira does the following to minimize dust transport:

Regular watering of roads, alleyways and pile surfaces.

- Maintaining adequate moisture in the compost piles.
- Monitoring of wind patterns prior to and during screening and turning operations.

Hazards. The Oliveira facility is not open to the public nor does it accept unscheduled deliveries. This reduces the inherent hazard potential of the site significantly. The General Manager ensures that all personnel assigned to a given operation are trained in required operations and maintenance and the identification of physical contaminants. At least one employee will be trained in hazardous waste identification. Employees are trained for operations surrounding free ranging cattle. Employees are further trained in basic OSHA safety measures, these include:

- Minimizing risks
- Personnel safety (use of appropriate safety clothing and protective gear)
- Proper operations and maintenance of equipment
- Overall site safety

Nuisances. Vectors, odors, dust, litter, and noise could all potentially contribute to nuisance conditions. However, each of these areas is addressed by the preceding text. Oliveira seeks to minimize the nuisance potential in each of these areas and is committed to working with the LEA and other agencies to assure no nuisances are created.

Fire Prevention, Protection, and Control. The main potential fire hazard within the compost operation are large, dry, piles of incoming material. Large, dry piles of screened overs are also a concern. Surface fires (fires which start and spread on the exterior surface of materials and remain exposed) are another hazard. Surface fires could potentially be started by lightning strikes, sparks from welding equipment, sparks or heat from operating equipment which ignite oil or dust particles, and wildfire. However the biggest concern for a fire at the facility is via spontaneous combustion. Spontaneous combustion can occur when a pile of organic material is generating more biological heat then it can dissipate.

Oliveira employs a number of Best Management Practices to reduce the potential for fires at the facility. These include:

Design/Structural Considerations

- Providing sufficient space to avoid exceeding the fire-safe height of piles [maximum of 12 feet for active windrow piles (Per Table 2-4, pile capacity was estimated using 10 feet, but piles may be as high as 12 feet), curing piles may be higher];
- Providing access to piles for firefighting equipment (15-foot wide lanes minimum between curing pile rows);
- Providing space to spread piles out. The current screening area between the curing pile and active pile areas provides additional open space if necessary;
- A minimum of 2 front end loaders will be available for use in moving and spreading out stored material for firefighting (though the facility currently has 5 front end loaders and in the event of a large fire, all would likely be used for fire-fighting; and

Operational/Management Practices

- Avoid active windrow pile heights greater than 12 feet (curing piles may be as high as 15 feet), and monitor for vents in deep piles. Use these vents to monitor internal pile temperatures if they develop;
- Visually inspect the piles for signs of hot spots. Indicators include evidence of vents, fissures, wet spots, and fissures of steam;
- Locate the hot spot before it turns into a fire. Seek out the hottest spot in the pile during routine temperature monitoring in the active piles. If there is a suspected hotspot in a curing pile, utilize a temperature probe to monitor and identify suspected hot spot.
- Monitoring internal temperature of piles during the active phase (fire potential if greater than 170° F for corrective action);
- Pile temperatures should be reduced by decreasing the pile height if storage pile temperatures
 reach greater than 170° F. Corrective actions shall be noted in the facility Operations log.
- Precautionary measures will be taken, as necessary, by personnel prior to breaking into an overly hot pile to avoid potential of a fire.

In addition, the Oliveira facility implements a variety of fire prevention, protection, and control measures at the facility, these include:

- I. Incoming green materials are processed within 7 days of receipt (after they have been browsed by the cattle). This relatively quick turnaround time minimizes their potential to spontaneously combust.
- 2. The facility has two 3,500-gallon water trucks which are on-site at all times to provide fire-fighting assistance.
- 3. Windrow temperatures are monitored daily during the high-temperature pathogen reduction phase and all compostable material stockpiles will be monitored and prevented from exceeding 170° F. Although the windrows are not the most likely place for spontaneous combustion to occur, if staff notices temperatures above 170° F, they will notify management who will take steps to lower the temperature. Although turning may immediately lower the temperature (and that may be the first course of action), ultimately if the piles, as built are routinely reaching temperatures above 170° F, they will need to be built lower so that the generated heat is able to dissipate before building up.
- 4. All access roads are at least 25 feet wide, providing adequate access for fire control equipment.
- 5. The grinder is cleaned after every shift and any accumulated material is cleaned away.
- 6. Fire extinguishers are maintained on all major pieces of equipment, by all fuel tanks, and in the Shop.

E. Equipment Breakdown or Power Failure

(e) A description of the proposed emergency provisions for equipment breakdown or power failure.

The critical material handling equipment (loaders) is diesel-powered, so they are not subject to power failure. Depending on the expected length of the outage (i.e., if it was predicted to be longer than a 24-hour outage) Oliveira can rent grinders and screens as needed from locally-based contractors. In the event of equipment breakdowns, Oliveira can rent equipment from nearby contractors.

In the event of an equipment breakdown or other unforeseeable circumstance that would prevent the processing of green waste within 48 hours, material may be stockpiled for no more than seven days. If the site cannot process (i.e., grind) feedstock within the required time frame, the material will be transferred to another facility for composting or beneficial reuse, or landfilled, as appropriate and approved. However, it is likely, in the event of a major grinder breakdown, Oliveira would arrange for a replacement grinder either through nearby contractors, equipment vendors, or from nearby facilities.

F. Storage Capacity

(f) A description of the storage capacity, feedstock pile sizes, and anticipated maximum and average length of time compostable materials will be stored at the facility.

Compost is stored at the facility for up to 180 days, depending on market conditions. Using average pile sizes, (windrows 10 feet high and 20 feet at the base) calculations of site capacity were created [in practice, especially at the beginning of the process, windrows may be as high as 15 feet, thus the calculations in Table 2-4 (Appendix A) are somewhat conservative]. Dimensions for all processing and receiving areas are shown in Table 2-3 (Appendix A), Storage capacities of each area are listed in Table 2-4 (Appendix A). Figures 3 & 4 (Appendix C) also shows designated areas for incoming feedstock and storage of finished compost.

The maximum amount of material that can be received per day is not limited by the size of the receiving area. Oliveira controls a large percentage of the material that is delivered and could reschedule/re-route deliveries if for some reason the site was receiving an unusual peak flow of deliveries. The annual site capacity is approximately 728,771cubic yards (182,193 x average retention time of 90-days) (see Table 2-4, Appendix A). The approximate amount of volume that could be stored at any one time is approximately 182,193 cubic yards, but that volume could be "turned" approximately 4 times assuming an average retention time of 90 days.

G. Facility Equipment

(g) A description of compostable materials handling equipment used at the facility including type, capacity, and number of units.

Processing equipment to be used for the Facility is shown in Table 2-5 (Appendix A).

H. Annual Site Capacity

(h) Anticipated annual operation capacity for the facility in cubic yards.

Storage capacity for each discrete processing area is shown in Table 2-4 (Appendix A). The facility expects to have the capacity to produce up to 500,000 cubic yards of finished organic products annually. Actual capacity will fluctuate based on market conditions, management intensity, availability of equipment, etc. Not all of this will be stored at the facility at any one time, feedstocks come in daily and finished compost products (both fines and overs) also go out every day.

I. Unusual Peak Loads

(i) A description of provisions to handle unusual peak loadings.

To handle additional throughput or unusual peak loadings, Oliveira can increase the use of processing equipment. Oliveira does not accept unscheduled deliveries and is not open to the public. Therefore, unusual peak loadings are less likely to occur. If necessary, during an unusual peak loading event, Oliveira will work with its customers to temporarily divert materials from the site.

J. Storage and Disposal of Residues

(j) A description of the proposed method for storage and final disposal of nonrecoverable or nonmarketable residues.

Any residues or nonrecoverable materials encountered during the daily operations will be disposed of utilizing on-site trash containers. Trash containers will be serviced within 48 hours. Dumpsters are typically hauled to the Fink Road Landfill.

K. Process Water Supply

(k) A description of the water supplies for process water required.

Water for process needs, dust control, and fire protection is provided by the nearby Byron-Bethany Irrigation District. The facility also has two wells on the property which provide back-up. Two 3,500-gallon water trucks move water around the site.

L. Oversight Personnel

(I) Identification of person(s) responsible for oversight of facility operations.

Brian Oliveira Oliveira Enterprises, Inc. 8005 Bruns Rd. Byron, CA 94514 209-835-9382

Emergency Contact Number: 209-321-0841

M. Site Restoration

(m) A description of the proposed site restoration activities, in accordance with section 17870.

The compost facility is not designed with a pre-scheduled termination date. However, the Facility will cease operations in compliance with CCR title 14 Section 17870. Thirty days prior to beginning site restoration, Oliveira will notify the enforcement agency in writing of the intent to perform site restoration. The grounds and drainage areas will be cleaned of all residues and

compostable materials (which will either be sold, or spread on appropriate agricultural land or disposed of at a permitted solid waste facility). All machinery will be cleaned and removed or stored securely. Were the facility to cease composting operations, it would likely revert to agricultural uses.

N. Odor Impact Minimization Plan

(n) An Odor Impact Minimization Plan pursuant to Section 17863.4.

An Odor Impact Minimization Plan (OIMP) is included as Appendix C. The OIMP has been developed to provide guidance to on-site personnel in the handling, storage, and removal of compostable materials, in accordance with I4 CCR, Section I7863.4. This OIMP will be revised as necessary to reflect any changes in the design or operation. A copy of the revisions will be provided to the LEA within 30 days of the changes. In addition, this OIMP will be reviewed annually to determine if any revisions are necessary.

The main components of the OIMP are as follows:

- 1. Odor Monitoring and Data Collection Protocol
- 2. Meteorological Conditions
- 3. Complaint Response Protocol
- 4. Design Considerations for Minimizing Odors
- 5. Operating Procedures for Minimizing Odors

Airport Land Use Commission

c/o Department of Conservation & Development

30 Muir Road Martinez, CA 94553

Phone: 1-855-323-2626

Contra Costa County



John Kopchik Director

Aruna Bhat Deputy Director

Jason Crapo Deputy Director

Maureen Toms
Deputy Director

Amalia Cunningham Assistant Deputy Director

December 17, 2021

Grant Farrington Contra Costa County Conservation and Development Department 30 Muir Road Martinez, CA 94553

RE: Application Review – Oliveira Composting Facility

County File#: LP21-2042 APN: 001-041-057, 058

124 & 136 Bethany Lane, Byron

Dear Mr. Farrington:

At the December 16, 2021 meeting of the Contra Costa Airport Land Use Commission ("ALUC" or "Commission"), the Commission discussed the subject project and concluded more information would be necessary prior to making a *Contra Costa Airport Land Use Compatibility Plan* consistency determination. The Commission has requested the following:

- 1. The Proposed Project be evaluated under the Federal Aviation Administration ("FAA") Obstruction Evaluation/Airport Airspace Analysis ("OE/AAA") to determine that the Project would not be a hazard to air navigation. The application can be found here: https://oeaaa.faa.gov/oeaaa/external/portal.jsp.
- 2. A final determination from the FAA that the Proposed Project will be compatible with the current area navigation ("RNAV") Global Positioning System ("GPS") Runway 30 Approach. Specifically, the FAA Flight Procedures Division must confirm the Proposed Project does not affect any current instrument flight procedures (approaches or departures), nor any documented plans on file. This will be inferred from the FAA's OE/AAA determination should said determination conclude that the Proposed Project presents no "Hazard to Air Navigation."

The applicant should submit the above information directly to ALUC staff upon receipt. ALUC staff will review the information and work with the applicant to schedule the Proposed Project for a future Commission determination hearing.

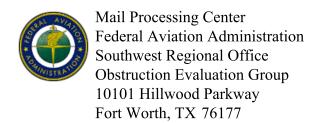
If you have any questions regarding the above, please do not hesitate to contact me at (925) 655-2917 or e-mail me at jamar.stamps@dcd.cccounty.us.

Sincerely,

Jamar Stamps, AICP

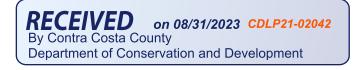
ALUC staff

cc: ALUC Commissioners



Issued Date: 12/28/2022

Brian Oliveira Oliveira Enterprises 8005 Bruns Road Byron, CA 94514



** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Waste Management Facility N/A

Location: Byron, CA

Latitude: 37-48-33.57N NAD 83

Longitude: 121-35-46.19W

Heights: 54 feet site elevation (SE)

20 feet above ground level (AGL)74 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

The proposal has the potential to attract hazardous wildlife on or near a public-use airport. The FAA recommends, and local code may require, adherence to guidance in Advisory Circular 150/5200-33, Hazardous Wildlife Attractants on or Near Airports. The FAA encourages the sponsor to coordinate with the local airport owner/operator prior to any construction at the site and to verify that no potential exists to attract hazardous wildlife on or near the public-use airport.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact Lan Norris, at (404) 305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-AWP-11687-OE.

Signature Control No: 535538109-566340772

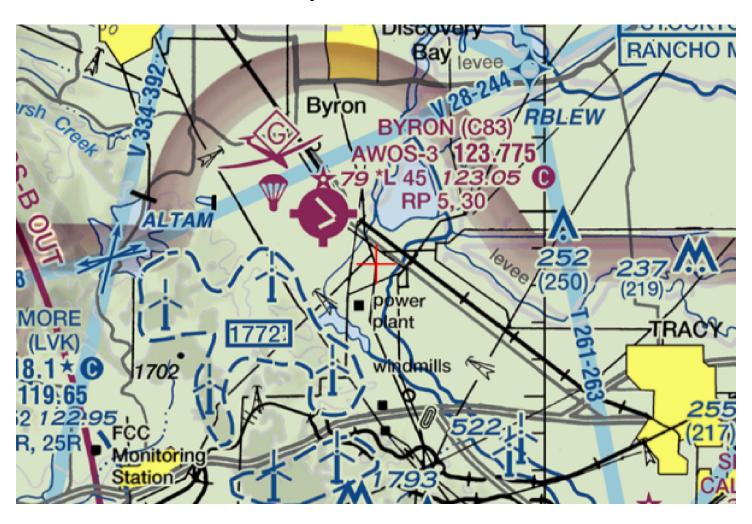
(DNE)

Mike Helvey Manager, Obstruction Evaluation Group

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2022-AWP-11687-OE

Existing compost facility, no new constriuction other than regulatorily required stormwater pond. Please see attached.



Contra Costa Airport Land Use Commission Oliveira Composting Facility (Byron)

COUNTY FILE #LP21-2042

APN: 001-041-057 & 001-041-058

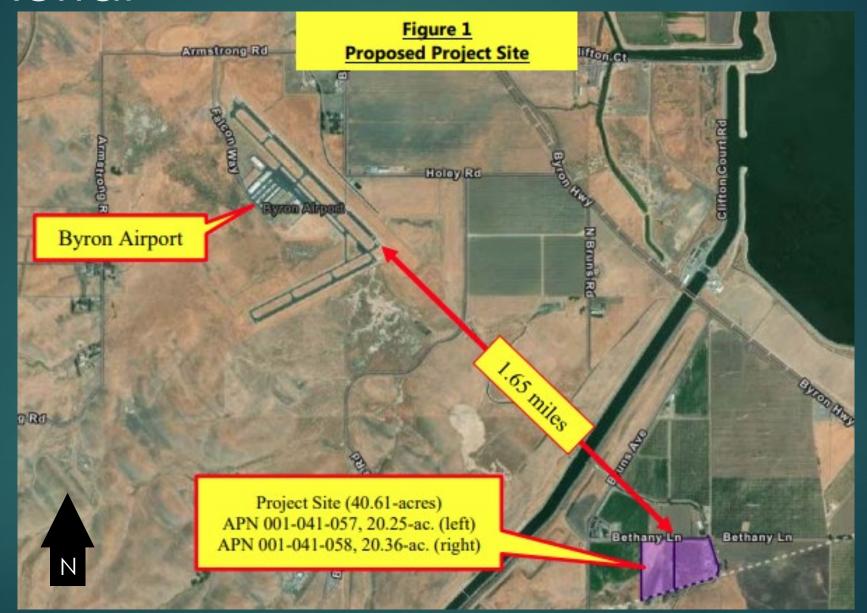
OCTOBER 16, 2025

JAMAR STAMPS, AICP, ALUC STAFF

Background

- ALUC staff presented the Proposed Project at the December 2021 ALUC meeting.
- Commissioners were mainly concerned with the Federal Aviation Administration ("FAA") Obstruction Evaluation/Airport Airspace Analysis ("OE/AAA").
- December 2022, the FAA returned a determination of no hazard to air navigation.
- September 2025 ALUC meeting:
 - Weekend operations
 - Wildlife monitoring reports to ALUC
 - Company website: https://oliveiraenterprises.com/
 - Applicant attend next ALUC meeting
 - Item continued due to lack of quorum

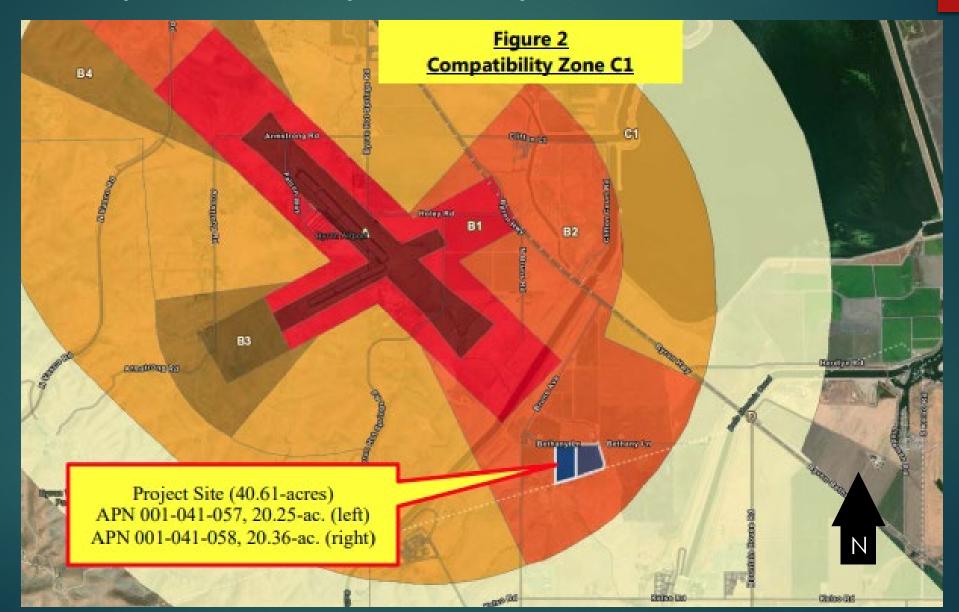
Site Aerial



Proposed Project Description

- ▶ Land Use Permit (retroactive) for a green material composting business.
- ➤ 30-acres of a 40.61-acre site (two parcels of 20.25-acres (001-041-057) and 20.36-acres (001-041-058)).
- Receives source-separated green material from customers that it hauls from as well as some commercial accounts that deliver contracted green material.
- Not open to the public.
- Site accessed via 124 & 136 Bethany Lane, off Bruns Road, just south of Byron Highway.

Byron Airport Compatibility Criteria



Vector Control

- ► Capacity of the site (in total material on-site at any one time) is estimated at 182,000 cubic yards.
- 2,500 cubic yards per day of incoming feedstocks.
- Approximately 78 trucks per day.
- Site monitoring.
- ▶ 1.65-miles from Byron Airport.
- Site activity is a vector deterrent.



Staff Recommendation

APPROVE the proposed project with the following condition:

- 1. Glare or distracting lights, which could be mistaken for airport lights, could pose a flight hazard and shall be shielded downward to ensure they do not aim above the horizon.
- 2. Project manager, property owner or designee shall contact the Contra Costa ALUC if site conditions require application of pest control mitigations.