

## State of New Jersey

PHILIP D. MURPHY Governor

SHEILA Y. OLIVER Lt. Governor

### DEPARTMENT OF ENVIRONMENTAL PROTECTION

AIR QUALITY, ENERGY AND SUSTAINABILITY Division of Air Quality Bureau of Stationary Sources 401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02 Trenton, NJ 08625-0420 SHAWN M. LATOURETTE Commissioner

### Air Pollution Control Preconstruction Permit and Certificate to Operate Construction of a New Source

### Permit Activity Number: PCP220001

**Program Interest No: 36448** 

Mailing Address	Plant Location
THOMAS O'FARRELL	VERANO NEW JERSEY
FACILITY MANAGER	3576 Rt 22
VERANO NJ	Branchburg Twp
3576 RT 22	Somerset County, New Jersey
Readington Twp, NJ 08889	

### Approval Date: <NO DATA FOUND> Expiration Date: <NO DATA FOUND>

The New Jersey Department of Environmental Protection (Department) has reviewed the above referenced air pollution control permit application. On the basis of the information provided, the Department concludes that the application satisfies all applicable requirements of the New Jersey Air Pollution Control regulations codified at N.J.A.C. 7:27 et seq. This permit allows for inspection and evaluation of the equipment by the Department to assure conformance with all provisions of N.J.A.C. 7:27 et seq. and any other applicable federal requirements codified at 40 CFR 52, 60, 61 and 63.

The equipment, that is authorized to be installed and operated under this approval, is described in Section A, Source Operations and Section D, Equipment Inventory. Equipment at the facility referenced by this Permit shall be operated in accordance with the Conditions of Approval set forth in Section D, Facility Specific Requirements.

The Department hereby issues this permit and certificate under the authority of chapter 106, P.L. 1967(N.J.S.A 26:2C-9.2). You may construct, reconstruct, install, or modify the above referenced equipment and/or control apparatus consistent with the approval.

The approved Permit is available for download in PDF format which contains the facility's specific requirements (compliance plan) at: http://www.nj.gov/dep/aqpp. After accessing the web site, click on "Approved PCP Permits" listed under "Reports" and then type in your Program Interest (PI) Number, 36448, as instructed on the screen. You will be able to view, print or electronically store your permit. If you have any questions regarding this permit approval, please contact the Department at the Preconstruction Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to

someone about any technical questions you may have. The Preconstruction Permit Technical Help Line number is 609-292-6716.

If, in your judgment as an applicant for an air pollution control permit, the Department is imposing any unreasonable Condition of Approval, you may contest the Department's decision and request a contested case hearing pursuant to the Administrative Code at N.J.A.C. 7:27-1.32(a). All requests for contested case hearings must be received in writing by the Department within twenty (20) calendar days of the date you receive this permit approval and must contain the information specified in the Administrative Hearing Request Checklist and Tracking Form.

If you have any non technical questions please use the Bureau's number 609- 292-0834. If you have any questions when filing a General Permit please use the General Permit Help number 609-633-2829.

Approved by:

Fred Ballay Preconstruction Permits

## Administrative Hearing Request Checklist and Tracking Form

### I. Document Being Appealed

Name of the Facility	Facility ID Number	Permit Activity Number	Issuance Date
VERANO NEW JERSEY	36448	PCP220001	

### II. Contact Information

Name of Person Requesting Hearing	Name of Attorney (if applicable)
Address:	Address:
Telephone:	Telephone:

### III. Please include the following information as part of your request:

- A. The date the permittee received the permit decision;
- B. Two printed copies of the document being appealed for submitting to address 1 below;

A PDF copy of the document being appealed on a CD – for submitting to address 2 below

- C. The legal and factual questions you are appealing;
- D. A statement as to whether or not you raised each legal and factual issues during the permit application process;
- E. Suggested revised or alternative permit conditions;
- F. An estimate of the time required for the hearing;
- G. A request, if necessary, for a barrier-free hearing location for physically disabled persons;
- H. A clear indication of any willingness to negotiate a settlement with the Department prior to the Departments processing of your hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

- New Jersey Department of Environmental Protection Office of Legal Affairs Attention: Adjudicatory Hearing Requests 401 E. State Street, P.O. Box 402 Trenton, New Jersey 08625
- Mail Code: 401-02 New Jersey Department of Environmental Protection Air Quality Program P.O. Box 420 Trenton, New Jersey 08625-0420 Phone: (609) 633-2829

## Administrative Hearing Request Checklist and Tracking Form

# IV. If you are not the applicant but rather an interested person claiming to be aggrieved by the permit decision, please include the following information:

- 1. The date you or your agent received notice of the permit decision (include a copy of that permit decision with your hearing request);
- 2. Evidence that a copy of the request has been delivered to the applicant for the permit which is the subject of the permit decision;
- 3. A detailed statement of which findings of fact and/or conclusion of law you are challenging;
- 4. A description of your participation in any public hearings held in connection with the permit application and copies of any written comments you submitted;
- 5. Whether you claim a statutory or constitutional right to a hearing, and, if you claim such a right, a reference to the applicable statute or explanation of how your property interests are affected by the permit decision;
- 6. If the appeal request concerns a CAFRA permit decision, evidence that a copy of the request has been delivered to the clerks of the county and the municipality in which the project which is the subject of the permit decision is located;
- 7. Suggested revised or alternative permit conditions;
- 8. An estimate of the time required for the hearing;
- 9. A request, if necessary, for a barrier-free hearing location for physically disable persons;
- 10. A clear indication of any willingness to negotiate a settlement with the Department prior to the Department's transmittal of the hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

New Jersey Department of Environmental Protection Office of Legal Affairs Attention: Adjudicatory Hearing Requests 401 East State Street, P.O. Box 402 Trenton, New Jersey 08625-0402

Mail Code: 401-02 New Jersey Department of Environmental Protection Air Quality Program P.O. Box 420 Trenton, New Jersey 08625-0420 Phone: (609) 633-2829

Signature

Date

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PERMIT INFORMATION

### Section A

### Facility Name: VERANO NEW JERSEY Facility ID No.: 36448 Permit Activity No.: PCP220001

### AUTHORIZED SOURCE OPERATIONS

This Preconstruction Permit and the Certificate to Operate for the following equipment is issued pursuant to N.J.A.C. 7:27-8.

**Description of Source Activity** 

**Source Operation Type**: Cannabis processing operations

Source Operation Description: Process includes, extractor, oil separator, spent cannabis storage and shredder.

**Source Operation Details**: The sources authorized by this permit shall be operated within the parameters specified in the Equipment, Control Device, and/or Emission Unit/Batch Process Operating Scenario Details of this permit. Operation of the authorized sources within these parameters is required <u>in addition</u> to compliance with the conditions specified in Section D– Facility Specific Requirements.

### Section B

## Facility Name: VERANO NEW JERSEY Facility ID No.: 36448 Permit Activity No.: PCP220001

## ACRONYMS

CEMS	Continuous Emissions Monitor System
CFR	Code of Federal Regulations
СО	Carbon Monoxide
COMS	Continuous Opacity Monitor System
EPA	United States Environmental Protection Agency
EMS	Emission Measurement Section - NJDEP
HAP	Hazardous Air Pollutant
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NOx	Oxides of Nitrogen
PM-2.5	All particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 microns
PM-10	All particulate matter having an aerodynamic diameter less than or equal to a nominal 10 microns
PST	Performance Specification Test
REO	Regional Enforcement Office - NJDEP
SO <sub>2</sub>	Sulfur Dioxide
TSP	Total Suspended Particulate Matter
VOC	Volatile Organic Compounds

Section C

### Facility Name: VERANO NEW JERSEY Facility ID No.: 36448 Permit Activity No.: PCP220001

### GENERAL PROVISIONS AND AUTHORITIES Preconstruction Permits

- 1. The permittee shall not construct, reconstruct, install, or modify a significant source or control apparatus serving the significant source without first obtaining a preconstruction permit under N.J.A.C. 7:27-8. [N.J.A.C. 7:27-8.3(a)]
- 2. The permittee shall not operate (nor cause to be operated) a significant source or control apparatus serving the significant source without a valid operating certificate. [N.J.A.C. 7:27-8.3(b)]
- 3. Permit Revisions:

The permittee shall not take any action which requires a permit revision, compliance plan change, seven-day-notice change, amendment, or change to a batch plant permit, under any applicable provision at N.J.A.C. 7:27-8.17 through 8.23, without complying with that applicable provision.

The following summarize N.J.A.C. 7:27-8.18 through 8.21:

- a. The permittee shall file a permit revision request and receive approval from the Department prior to increasing any maximum allowable emission limit, increasing actual emissions, to a rate or concentration greater than a maximum allowable emission, causing the emissions of a new air contaminant, use a new raw material, reconstructing equipment, change the ground level concentration of an air contaminant in an area where the public has access, replace the permitted source, or constructing or installing a new significant source. [N.J.A.C. 7:27-8.18]
- b. The permittee shall file a compliance plan change request and receive approval from the Department prior to decreasing the frequency of testing, monitoring, recordkeeping, or reporting, changing the monitoring method, changing a level, rate, or limit of an operational parameter included in the conditions, or reducing a source's potential to emit. [N.J.A.C. 7:27-8.19]
- c. At least seven days prior to proceeding with a physical or operational change that is outside the scope of activities allowed by this permit, but will not increase emissions over the allowable emissions and will not alter the stack characteristics, the permittee shall file a seven-day-notice

change. The permittee may proceed with the proposed changes seven days after such notice is filed with the Department. [N.J.A.C. 7:27-8.20].

- d. The permittee shall file an amendment within 120 days of making any change of the information which allows the Department to identify and contact the permittee, changing the name, number or designation of any equipment or stack covered by this permit, changing the parameters of a stack in such a way to reduce the ground level concentration of an air contaminant, or correction of a typographical error that will not result in an increase of actual or allowable emissions. [N.J.A.C. 7:27-8.21] The permittee shall review the provisions of N.J.A.C. 7:27-8.18 through 7:27-8.21 to determine the appropriate type of request to file.
- 4. The permittee shall make the preconstruction permit or certificate, together with any amendments, seven-day-notices, or other documents related to the permit and certificate, readily available for Department inspection on the operating premises. [N.J.A.C. 7:27-8.3(d)]
- 5. The permittee shall not use or cause to be used the equipment or control apparatus unless all components connected or attached to, or serving, the equipment or control apparatus, are functioning properly and are in compliance with the preconstruction permit and certificate and all conditions and provisions thereto. [N.J.A.C. 7:27-8.3(e)]
- 6. A preconstruction permit is not transferable either from the location authorized in the preconstruction permit to another location, or from any one piece of control apparatus or equipment to another piece of control apparatus or equipment. [N.J.A.C. 7:27-8.3(f)]
- 7. Once a permit or certificate is issued, the permittee is fully responsible for compliance with N.J.A.C. 7:27-8 and with the permit and certificate, including adequate design, construction, and operation of the source, even if employees, contractors, or others work on or operate the permitted source. If the Department issues any other requirement with the force of law, such as an order, which applies to the source, the permittee is also responsible for compliance with that requirement. [N.J.A.C. 7:27-8.3(g)]
- 8. Preconstruction permits and certificates do not any way relieve the permittee from the obligation to obtain necessary permits from other government agencies and to comply with all other applicable Federal, State, and local rules and regulations. [N.J.A.C. 7:27-8.3(h)]
- 9. The Department and its representatives have the right to enter and inspect any facility or property in accordance with N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-8.3(m)]
- 10. There shall be an affirmative defense to liability for penalties for a violation of a preconstruction permit or certificate occurring as a result of an equipment malfunction, an equipment start-up, an equipment shutdown, or during the performance of necessary maintenance. The affirmative defense shall be asserted

and established as required pursuant to P.L. 1993. c.89 (adding N.J.S.A. 26:2C-19.1 through 2C-19.5) and any rules the Department promulgates thereunder, and shall meet all of the requirements thereof. There shall also be an affirmative defense to liabilities for penalties or other sanctions for noncompliance with any technology based emission limitation in this permit or certificate, if the noncompliance was due to an emergency as defined at N.J.A.C. 7:27-22.1, provided that the affirmative defense is asserted and established in compliance with 40 CFR 70.6(g) and meets all requirements thereof. [N.J.A.C. 7:27-8.3(n)]

- 11. Any person to whom the Department has issued a preconstruction permit or certificate shall comply with all terms and conditions of any order related to the preconstruction permit or certificate. [N.J.A.C. 7:27-8.13(a)]
- 12. The permittee shall maintain all records required in the permit for a period of five (5) calendar years. [N.J.A.C. 7:27-8.13(a)]
- 13. The Department may change the conditions of approval of any approved certificate to operate at the time of renewal of a temporary operating certificate; at the time of approval or renewal of a five-year operating certificate; or at any time during the period a certificate is in effect, if the Department determines that such change is necessary to protect human health or welfare or the environment. [N.J.A.C. 7:27-8.13(b)]
- 14. Upon request of the Department, the permittee shall submit to the Department information relevant to the operation of equipment and control apparatus including all information specified at N.J.A.C. 7:27-8.13(c). [N.J.A.C. 7:27-8.13(c)]
- 15. If the conditions of a preconstruction permit or certificate to operate require the Department to incur any of the following charges, the permittee shall reimburse the Department for the full amount of these charges: (1) The charges billed by any phone company for the maintenance of a dedicated telephone line required by this permit or the certificate to operate for the electronic transmission of data; or (2) The charges billed by any laboratory for performing the analysis of audit samples collected pursuant to testing or monitoring required by this permit or the certificate to operate. [N.J.A.C. 7:27-8.13(g)]
- 16. Any failure to comply with the operating requirements or exceedance of emission concentrations specified in a preconstruction permit shall be reported within three (3) business days by calling the Environmental Action Hotline at (877) 927-6337 AND in writing to the Regional Enforcement Office within 30 days of the failure or exceedance. [N.J.A.C. 7:27-8.13(h)]
- 17. The permittee shall, when requested by the Department, provide such testing facilities exclusive of instrumentation and sensing devices as may be necessary for the Department to determine the kind and amount of air contaminants emitted from the equipment or control apparatus. The testing facilities shall include the utilities, the structure to hold testing equipment and/or personnel, and any ports in stacks needed to carry out testing required by this permit. During testing by the Department, the equipment and control apparatus shall be operated under such conditions within their capacities as may be requested by the Department. The

test facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, and shall conform to all applicable laws, regulations, and rules concerning safe construction and safe practice. Testing facilities, which contain platforms and other means of personnel access, shall conform to OSHA standards. [N.J.A.C. 7:27-8.13(i)]

- 18. Upon request of the Department, the permittee shall submit to the Department any record relevant to any permit or certificate. Such records shall be submitted to the Department within thirty (30) days of the request by the Department or within a longer time period if approved in writing by the Department. [N.J.A.C. 7:27-8.15(a)]
- A permittee shall submit any required report in a format and on a schedule approved by the Department. Such report shall be transmitted on paper, by hand delivery, on computer disk, or electronically, at the discretion of the Department. [N.J.A.C. 7:27-8.15(b)]
- 20. Any report submitted to the Department, including but not limited to, a report submitted as an amendment of this permit or the certificate to operate pursuant to N.J.A.C. 7:27-8.3(c) shall include, as an integral part of the report, certifications complying with N.J.A.C. 7:27-1.39.
- 21. Upon request of the Department, the permittee shall report on forms obtained from the Department the air contaminant actual emissions and information relevant thereto, of any air contaminant or category of air contaminant emitted by the equipment, control apparatus, or source operation. [N.J.A.C. 7:27-8.15(d)]
- 22. Any emission limit values in a preconstruction permit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to three significant figures (e.g. a printed limit of "1 lb/hr" means a limit of "1.00 lb/hr").
- 23. This listing of requirements reflects the state rules and regulations that apply to a majority of sources. If a specific requirement in a rule or regulation that applies to a permittee is not included in this section or in the "Facility Specific Requirements" it does not relieve the permittee from the obligation to comply with that regulation.
- 24. The following Department offices may be referenced in a preconstruction permit. Please use the following addresses when submitting any correspondence to these offices:

Emission Measurement Section Mail Code: 09-01, P.O. Box 420 Trenton, NJ 08625-0420

Central Regional Enforcement Office Mail Code: 22-03A; P.O. Box 420 Trenton, NJ 08625-0420 Northern Regional Enforcement Office 7 Ridgedale Avenue Cedar Knolls, NJ 07927

Southern Regional Enforcement Office 2 Riverside Drive – Suite 201 Camden, NJ 08103

- 25. In accordance with N.J.A.C. 7:27-8.13(e), facilities are subject to 4 billable compliance inspections over the life of the Operating Certificate. Facilities will be invoiced for a service fee per inspection pursuant to N.J.A.C. 7:27-8.6 after the periodic compliance inspection is conducted.
- 26. The permittee shall pay fees to the Department pursuant to N.J.A.C.7:27-8.

Section D

Facility Name: VERANO NEW JERSEY Facility ID No.: 36448 Permit Activity No.: PCP220001

### PERMIT INFORMATION

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FACILITY SPECIFIC REQUIREMENTS

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Section D

### Facility Name: VERANO NEW JERSEY Facility ID No.: 36448 Permit Activity No.: PCP220001

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## New Jersey Department of Environmental Protection Facility Specific Requirements

Subject Item: FC

Ref.# **Applicable Requirement Monitoring Requirement Recordkeeping Requirement** Submittal/Action Requirement The Permittee shall not cause, suffer, or None. None. None. allow to emit into the outdoor atmosphere substances in quantities which shall result in air pollution as defined at N.J.A.C. 7:27-5.1. [N.J.A.C. 7:27-5] 2 The permittee shall not suffer, allow, or None. None. None. permit any air contaminant detectable by the sense of smell to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant which occurs only in areas over which the permittee has exclusive use or occupancy. In determining whether an odor unreasonably interferes with the enjoyment of life or property, the Department shall consider all of the relevant facts and circumstances, including, but not limited to, the character, severity, frequency, and duration of the odor, and the number of persons affected thereby. In considering these and other relevant facts and circumstances, no one factor shall be dispositive, but each shall be considered relevant in determining whether an odor interferes with the enjoyment of life and property, and, if so, whether such interference is unreasonable considering all of the circumstances. [N.J.A.C. 7:27-8.3(j)]

## New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Process monitors must be operated at all times when the associated process equipment is operating except during outage time allowed by Department guidelines/procedures or as outlined in Technical Manual 1005. [N.J.A.C. 7:27- 8.13(a)]	None.	Other: Keep records of parameters monitored by the process monitor(s) as instructed by the Department's guidelines/procedures or as outlined in Technical Manual 1005. [N.J.A.C. 7:27- 8.13(d)].	None.
4	The permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the preconstruction permit. Whenever the permittee makes a replacement, modification, change or repair of a certified CEMS or COMS that may significantly affect the ability of the system to accurately measure or record data, the permittee must recertify the CEMS or COMS in accordance with Section V.B. and Appendix E of Technical Manual 1005. The permittee is responsible for contacting the Emission Measurement Section to determine the need for recertification process. The permittee is responsible for any downtime associated with the replacement, modification, change or repair of the CEMS or COMS. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
5	A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the department. A person who fails to so notify the department is liable to the penalties and procedures prescribed in this section. [N.J.S.A. 26: 2C-19(e)]	None.	None.	Notify by phone: Upon occurrence of event. The Permittee shall immediately notify the Department of any non-compliance by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26: 2C-19(e)]

## New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	The permittee is required to submit annual emission statements of their actual emissions if the Potential-to-emit for the entire facility equals to or exceeds any of the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional information about Emission Statement reports can be obtained by calling (609) 984-5483. Air Contaminant Threshold in Tons per Year: VOC: 10 tons per year NOx: 25 tons per year CO: 100 tons per year SO2: 100 tons per year TSP: 100 tons per year PM2.5: 100 tons per year PM10: 100 tons per year Ammonia (NH3): 100 tons per year Lead(Pb): 5 tons per year	None.	None.	None.

## New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The permittee is required to submit a Title V Operating Permit application, within one year, if the potential-to-emit for the entire facility equal to or exceeds any of the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional information about Operating Permits can be obtained by calling the Operating Permit Hotline at (609) 633 - 8248. Air Contaminant Threshold in Tons per Year: CO: 100 tons per year PM10: 100 tons per year PM2.5: 100 tons per year SO2: 100 tons per year SO2: 100 tons per year SO2 (as a PM2.5 precursor): 100 tons per year NOx: 25 tons per year NOx: 25 tons per year Lead: 10 tons per year Any HAP: 10 tons per year All HAPs collectively: 25 tons per year Any other air contaminant, except CO2: 100 tons per year [N.J.A.C. 7:27-22]	None.	None.	None.
8	Potential to Emit (PTE) of all other air contaminants, not listed in this permit, shall be below their respective reporting thresholds for contaminants listed as N.J.A.C. 7:27-8, Appendix I, Table A, and N.J.A.C. 7:27-17.9(a), as applicable. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
9	The Department and its authorized representatives shall have the right to enter and inspect any facility subject to N.J.A.C. 7:27-8, or portion thereof. [N.J.A.C. 7:27-1.31]	None.	None.	None.

## New Jersey Department of Environmental Protection

## Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Continuous recording for process monitors must be at a sufficient frequency and resolution to be able to document compliance or non-compliance in accordance with Technical Manual 1005 for CEMS (TM1005(B)(3)). [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
11	Consistent with EPA's National Stack Testing Guidance and Technical Manual 1004, a facility may not stop an ongoing stack test because it would have failed the test unless the facility also ceases operation of the equipment in question to correct the issue. Stopping an ongoing stack test in these instances will be considered credible evidence of emissions non-compliance. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
12	All information provided in the application as well as the information related to the application included as Attachments to the application shall be considered as a part of the permit and is subject to enforcement. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
13	Any information contained in an approved application and any condition of approval thereof, are subject to enforcement. This includes the following application information, which shall constitute maximum allowable limits, unless the Department establishes other limits in the conditions of approval: 1. Rates of emission of each air contaminant and each category of air contaminant listed; 2. Total hours of operation per time period; and 3. Any rate of production. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.

## New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:U1 Ethanol Extraction ProcessSubject Item:CD1 Carbon Filter

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
1	The permittee shall maintain and operate the control device according to manufacturer specifications and replace the unit if odors observed. [N.J.A.C. 7:27- 8.13(a)]	weekly.[N.J.A.C. 7:27- 8.13(d)].	Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation. The permittee shall record date, the results of weekly monitoring, date when carbon is replaced and weight of carbon added. [N.J.A.C. 7:27- 8.13(d)]	None.



## New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:U1 Ethanol Extraction Process

**Operating Scenario: OS Summary** 

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 0.788 tons/yr. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
2	PM-10 (Total) <= 0.788 tons/yr. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
3	VOC (Total) <= 10.75 tons/yr. [N.J.A.C. 7:27- 8.13(a)]	VOC (Total): Monitored by material balance each month during operation, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall monitor the amount of VOC used by subtracting the amount of VOC recovered/disposed from the amount of VOC added to the system. [N.J.A.C. 7:27- 8.13(d)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall record the amount of fresh VOC added to the system, VOC recovered/disposed of as waste and the net VOC used. [N.J.A.C. 7:27-16.16(g)1ii]	None.
4	VOC charge rate in extraction/evaporator sytem (E1 and E2) <= 24 gallons per hour [N.J.A.C. 7:27- 8.13(a)]	Monitored by calculations once initially, based on a batch cycle average and then each month during operation. The process rate shall be determined by VOC charged for four 15 lb cannabis bundles divided by the time to process four bundles. [N.J.A.C. 7:27- 8.13(d)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and each month during operation. [N.J.A.C. 7:27- 8.13(d)]	None.
5	The permittee shall comply with the Odor Control Plan attached to this permit. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.

## New Jersey Department of Environmental Protection Facility Specific Requirements

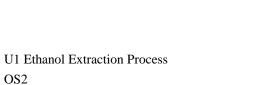
Emission Unit:U1 Ethanol Extraction ProcessOperating Scenario:OS1 Cannabis Extraction

1       VOC (Total) <= 1.32 lb/hr. [N.J.A.C. 7:27- 8.13(a)]       None.       Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1ii].       None.         2       Maximum VOC charged 140,208 gallons per 12 months period [N.J.A.C. 7:27- 8.13(a)]       Monitored by material feed/flow monitoring each month during operation, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27- 8.13(d)]       Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall record total VOC charged in       None.	
per 12 months period [N.J.A.C. 7:27- 8.13(a)]each month during operation, based on a consecutive 12 month period (rolling 1parameter or storing data in a computer data system each month during operation. The	
a month and in a consecutive 12 month period. [N.J.A.C. 7:27- 8.13(d)]	

## New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:U1 Ethanol Extraction ProcessOperating Scenario:OS2 Crude Oil Separation

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
1	VOC (Total) <= 0.44 lb/hr. [N.J.A.C. 7:27- 8.13(a)]	None.	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1ii].	None.



## New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:U1 Ethanol Extraction ProcessOperating Scenario:OS3 Spent Cannabis Storage

		1		
Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
1	VOC (Total) <= 1.14 lb/hr. [N.J.A.C. 7:27- 8.13(a)]	None.	Other: Maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions.[N.J.A.C. 7:27-16.16(g)1ii].	None.
2	The facillity shall not store more than 1175 lbs of spent cannabis at a time. [N.J.A.C. 7:27- 8.13(a)]	Monitored by material balance upon occurrence of event. The permittee shall monitor the amount of spent cannibis stored to whenever material is added or removed from the storage. [N.J.A.C. 7:27- 8.13(d)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Permittee shall record the amount of spent cannabis added, removed and net cannabis stored whenever material is added or removed from the storage. [N.J.A.C. 7:27- 8.13(d)]	None.

## New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:U1 Ethanol Extraction ProcessOperating Scenario:OS4 Cannabis Shredding

Ref.#	Applicable Requirement	Monitoring Requirement	<b>Recordkeeping Requirement</b>	Submittal/Action Requirement
1	TSP <= 0.18 lb/hr. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
2	PM-10 (Total) <= 0.18 lb/hr. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
3	Maximum material processed <= 3659 lb/hr [N.J.A.C. 7:27- 8.13(a)]	Monitored by calculations once initially, based on a 1 hour block average and then each month during operation. [N.J.A.C. 7:27-8.13(d)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and then each month during operation. [N.J.A.C. 7:27- 8.13(d)]	None.
4	Opacity: no visible emissions, exclusive of visible condensed water vapor [N.J.A.C. 7:27- 8.13(a)]	Opacity: Monitored by visual determination each month during operation. Conduct visual inspections during daylight hours to determine if the stack has visible emissions, other than condensed water vapor. [N.J.A.C. 7:27- 8.13(d)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The permittee shall maintain the following records: 1) Date and time of each observation; 2) Emission point (PT) number; 3) Observed results and conclusions; 4) Description of corrective action taken, if needed; 5) Date and time opacity problem was solved, if applicable; 6) Results of opacity reading in accordance with N.J.A.C. 7:27B-2, if conducted; and 7) Name of person(s) conducting visual observations. [N.J.A.C. 7:27-8.13(d)]	Comply with the requirement: Upon occurrence of event.If visible emissions are observed: (1) Verify the equipment and/or control device causing visible emissions is operating according to manufacturer's specifications. If it is not operating properly, take corrective action immediately to eliminate the excess emissions. (2) If the visible emissions proble is not corrected within 24 hours, a certified opacity reader shall perform an opacity observation, in accordance with N.J.A.C. 7:27B-2 each day until the opacity problem i successfully corrected. [N.J.A.C. 7:27- 8.13(d)]

## New Jersey Department of Environmental Protection Reason for Application

### **Permit Being Modified**

Permit Class:	Number:0
---------------	----------

**Description** Verano NJ is submitting this pre-construction permit application as requested by NJDEP in of Modifications: the Administrative Order and Civil Administrative Penalty Assessment (AONOCAPA) dated August 23, 2021. Pursuant to N.J.A.C. 7:27-22.3(b), the owner or operator of a facility subject to this subchapter shall ensure that no person shall use or operate any significant source operation at the facility without a valid operating permit for the facility, which covers the source operation. With this application Verano NJ is requesting authorization to construct and operate a cannabis extraction process.

Update as of January 10, 2022: Verano is submitting this updated pre-construction permit application to reflect the following NJDEP requests:

1. Updating emission calcuations to reflect an hourly limitation that the facility is requesting to take to remain below State-of-the-Art emission thresholds.

2. Adding the cannabis shredder as a significant source (E4) as requested by Robin Jones in the Notice of Violation (NOV) dated December 15, 2021.

3. Updating the diameter and flow rate of Emission Point 1 and 2.

Update as of September 7, 2022: Verano is submitting this updated pre-construction permit application to reflect the following NJDEP requests:

1. Uploading the Odor Control Plan to revise the description of PT-1.

2. Adding the carbon filter in PT-1 as a control device (CD-1).

## New Jersey Department of Environmental Protection Facility Profile (General)

Facility Name (AIMS): Verano NJ

**Mailing** 3576 RT 22

Street 3576 RT 22 Address: READINGTON TWP., NJ 08889

Address: READINGTON TWP., NJ 08889

Facility ID (AIMS): 36448

- State Plane Coo	ndinatası —
State Flane Coo	rumates:
X-Coordinate:	41
Y-Coordinate:	75
Units:	Dec. Deg.
Datum:	WGS84
Source Org.:	Address Match
Source Type:	Approx. Addr. Match

County: Hunterdon Location The facility is located along US Route 22 in

**Description:** Readington Twp., NJ approximately 9 miles east from Interstate 78 Industry:

Primary SIC: Secondary SIC: NAICS: 111419

## New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: Air Permit Information Contact		
Organization: Verano NJ		Org. Type: Corporation
Name: Thomas O'Farrell		NJ EIN:
Title: Facility Manager		
<b>Phone:</b> (908) 246-7507 x	Mailing	3756 RT 22
<b>Fax:</b> () - x	Address:	Readington Twp., NJ 08889
<b>Other:</b> ( ) - x		
Туре:		
Email: Thomas.O'Farrell@veranobrands.com		
Contact Type: Consultant		
Organization: Langan Engineering and Environmental	Services	Org. Type: Corporation
Name: Stephanie Friel		NJ EIN:
Title: Project Engineer		
<b>Phone:</b> (212) 479-5547 x	Mailing	21 Penn Plaza
<b>Fax:</b> () - x	Address:	360 West 31st Street 8th Floor
Other: ( ) - x		New York, NY 10001-2727
Туре:		
Email: sfriel@langan.com		
Contact Type: Fees/Billing Contact		
Organization: Verano NJ		Org. Type: Corporation
Name: Joseph Hall		NJ EIN:
Title: General Manager		
<b>Phone:</b> (732) 423-5701 x	Mailing	3756 RT 22
<b>Fax:</b> () - x	Address:	Readington, NJ 08889
<b>Other:</b> ( ) - x		
Туре:		
Email: joseph.hall@veranobrands.com		

## New Jersey Department of Environmental Protection Facility Profile (General)

### Contact Type: Responsible Official

Organization: Verano NJOrg. Type: CorporationName: Thomas O'FarrellNJ EIN:Title: Facility Manager3756 RT 22Phone: (908) 246-7507 xMailing<br/>Address:Fax: ( ) - xAddress:Other: ( ) - xReadington, NJ 08889Type:Email: Thomas.O'Farrell@veranobrands.com

## New Jersey Department of Environmental Protection Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand- Fathered	Last Mod. (Since 1968)	Equip. Set ID
E1	E1	CUP-30 Ethanol Extraction System and associated vessels	Manufacturing and Materials Handling Equipment		4/15/2020	No		
E2	E2	Falling Film Evaporator (FFE) system and associated filter, evaporator, and two holding kegs	Manufacturing and Materials Handling Equipment		4/15/2020	No		
E3	E3	Spent Cannabis Storage	Manufacturing and Materials Handling Equipment		4/15/2020	No		
E4	E4	Cannabis Shredder	Manufacturing and Materials Handling Equipment		4/15/2020	No		

Date: 1/5/2023

#### 36448 VERANO NEW JERSEY PCP220001 E1 (Manufacturing and Materials Handling Equipment) Print Date: 10/9/2022

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Capacity:

Units:

Description (if other):

Have you attached a diagram showing the location and/or the configuration of this equipment?

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

Comments:

Varies	
Varies	
Varies	
Ethanol Extraction System	
3.00E+01	
gallons	
Yes 🔻	

No

▼

▼

This ethanol extraction system includes the CUP-30 ethanol extraction vessel, a 30-gallon Spyder vessel for holding ethanol between extraction of each cannabis bundle, and a 30-gallon holding keg for holding saturated tincture after all cannabis bundles are extracted. The CUP-30 has the capacity to hold ~15 lb of cannabis with the 30 gallons of ethanol.

#### 36448 VERANO NEW JERSEY PCP220001 E2 (Manufacturing and Materials Handling Equipment) Print Date: 10/9/2022

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Capacity:

Units:

Description (if other):

Have you attached a diagram showing the location and/or the configuration of this equipment?

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

Comments:

Varies	
Varies	
Varies	
Crude Oil Separation Process	
3.00E+01	
gallons	•
Mar	
Yes 👻	

No

-

The crude oil separation process begins by filtering the saturated tincture through the lenticular filter. The tincture is sent to a 30-gallon tincture holding keg, before passing through the Falling Film Evaporator (FFE). Ethanol is separated from the tincture and sent to a 30-gallon holding keg. The tincture is sent to the Rotary Evaporation (Rotovap) system and condensed ethanol is again sent to the 30-gallon holding keg. The crude oil is sent to an oven for decarboxylation. The condensed ethanol collected in the holding keg is re-used in the cannabis extraction process equipment (E1)

#### 36448 VERANO NEW JERSEY PCP220001 E3 (Manufacturing and Materials Handling Equipment) Print Date: 10/9/2022

Make:

Manufacturer:

Model:

Type of Manufacturing and Materials Handling Equipment:

Capacity:

Units:

Description (if other):

Have you attached a diagram showing the location and/or the configuration of this equipment?

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

Comments:

N/A	
N/A	
N/A	
Spent Cannabis Storage	
8.40E+01	
other units	•
bundles of spent cannabis	

Yes 💌

### No

▼

This "equipment" represents storage of spent, bagged cannabis prior to removal for off-site destruction. The maximum storage capacity is 84 bundles of spent cannabis.

	1 mit Date: 10/3/2022	
Make:		
Manufacturer:		
Model:		
Type of Manufacturing and Materials Handling Equipment:	Straw and Cannabis Shredding	
Capacity:		
Units:	other units	
Description (if other):		
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes 💌	
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?		
Comments:	No	
Comments.	*	

# 36448 VERANO NEW JERSEY PCP220001 E4 (Manufacturing and Materials Handling Equipment) Print Date: 10/9/2022

## New Jersey Department of Environmental Protection Control Device Inventory

CD NJID	Facility's Designation	Description	СD Туре	Install Date	Grand- Fathered	Last Mod. (Since 1968)	CD Set ID
CD1	CD1	Carbon Filter	Adsorber	4/15/2020			



364	448 VERANO NEW JERSEY PCP220001 CD1 (Adsorber) Print Date: 10/9/2022
Make:	Permatron
Manufacturer:	LIT - Activated Carbon
Model:	/
Adsorber Type:	Fixed (Non-Regenerative)
Description:	
Maximum Gas Flow Rate to	
Adsorber (acfm):	570
Maximum Temperature of Vapor Stream to Adsorber (°F):	70
Minimum Temperature of Vapor Stream to Adsorber (°F):	70
Minimum Moisture Content of Vapor Stream to Adsorber (%):	
Type of Adsorbant:	Carbon Filter
Bed Height:	
Bed Length:	
Bed Width:	
Units:	
Other Bed Dimension:	
Value:	
Units:	
Minimum Pressure Drop Across Adsorbant (in. H20):	
Maximum Pressure Drop Across Adsorber (in. H20):	
Total Weight of Adsorbant (lbs):	
Total Weight of Adsorbant When Saturated (lbs):	
Maximum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	
Minimum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	
Set-up Type:	Single
Method of Determining Breakthroug	gh (check all that apply):
Continuous Emissions Monitor (CEM):	
Replacement By Weight:	
Periodic Testing:	
Sampling Frequency:	
Sampling Device:	
Other:	
Description:	
Minimum Concentration at Breakthrough (ppmvd):	
Handling Method of Saturated Adsorbant:	
Method of Regeneration:	

Maximum Number of Courses	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
Comments:	

## VERANO NEW JERSEY (36448) PCP220001

## New Jersey Department of Environmental Protection Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam.	Height (ft.)	Dist. to Prop.	Exhaust Temp. (deg. F)		Exhaust Vol. (acfm)			Discharge Direction	PT Set ID	
IJID	Designation			(in.)	(11.)	Line (ft)	Avg.	Min.	Max.	Avg.	Min.	Max.	Direction	Set ID
PT1	PT1	Ethanol Extraction Room Fugitives	Round	999	4	90	70.0	70.0	70.0	570.0	0.0	570.0	Up	
PT2	PT2	Storage Room Fugitives	Round	999	4	58	70.0	70.0	70.0	1,500.0	0.0	1,500.0	Up	
РТ3	PT3	Cannabis Shredder Fugitives	Surface	999	4	142	70.0	70.0	70.0	1,200.0	0.0	1,200.0	Up	

Date: 1/5/2023

## VERANO NEW JERSEY (36448) PCP220001

## New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

#### U1 U1 Ethanol Extraction Process

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Annual Oper. Hours		Flow VOC (acfm)		Temp. (deg F)		
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(S)	Min.	Max.	Range	Min.	Max.	Min.	Max.
OS1	OS1	Cannabis Extraction	Normal - Steady State	E1	CD1 (P)	PT1	3-02-888-01	0.0	5,842.0	В	0.0	570.0	60.0	78.0
OS2	OS2	Crude Oil Separation	Normal - Steady State	E2	CD1 (P)	PT1	3-02-888-01	0.0	8,760.0	В	0.0	570.0	60.0	78.0
OS3	OS3	Spent Cannabis Storage	Normal - Steady State	E3		PT2	3-02-888-01	0.0	8,760.0	В	0.0	1,500.0	60.0	78.0
OS4	OS4	Cannabis Shredding	Normal - Steady State	E4		PT3	3-02-888-01	0.0	8,760.0		0.0	1,200.0	60.0	78.0

Date: 1/5/2023

36448 VERANO NEW JERSEY PCP220001 U1 OS1 (Raw Materials) Print Date: 10/9/2022										
Raw Material	CAS Number	Physical State	Molecular Weight (Ibs/Ibs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units		
Ethyl alcohol	00064-17-5	Liquid 🗾	46.070	Yes 🗸	100.00	48.000	6.500	lb/gal	-	

		FIIII	Dale. 10/9/2022	
Pollutant Category		Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO				
HAP (Total)				
NOx				
Other (Total)				
PM-10				
PM-2.5				
Pb	▼			
SO2	▼			
TSP				
VOC (Total)				

#### 36448 VERANO NEW JERSEY PCP220001 U1 OS1 (Efficiency Table - CD1) Print Date: 10/9/2022

36448 VERANO NEW JERSEY PCP220001 U1 OS2 (Raw Materials) Print Date: 10/9/2022										
Raw Material	CAS Number	Physical State	Molecular Weight (Ibs/Ibs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units		
Ethyl alcohol	00064-17-5	Liquid 🗸	46.070	Yes 🗸	100.00	48.000	6.500	lb/gal	-	

36448 VERANO NEW JERSEY PCP220001 U1 OS3 (Raw Materials) Print Date: 10/9/2022										
Raw Material	CAS Number	Physical State	Molecular Weight (Ibs/Ibs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units		
Ethyl alcohol	00064-17-5	Liquid 🗸	46.070	Yes 🗸	100.00	48.000	6.500	lb/gal	-	

### **ODOR MANAGEMENT PLAN**

## **ODOR CONTROL PLAN**

for

## Verano NJ 3576 Route 22 Readington Township, NJ 08889

**Prepared For:** 

Verano NJ 3576 Route 22 Readington Township, NJ 08889

**Prepared By:** 

Langan Engineering and Environmental Services, Inc. 300 Kimball Drive Parsippany, New Jersey 07054 NJ Certificate of Authorization No: 24GA27996400

> June 7, 2022 Revised: September 1, 2022 100944601



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## **ODOR MANAGEMENT PLAN**

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Appendix B Outdoor Odor Assessment Log

### **ODOR MANAGEMENT PLAN**

#### 1.0 INTRODUCTION

Langan Engineering and Environmental Services, Inc. (Langan) has prepared this Odor Control Plan on behalf of the Verano NJ cannabis cultivation and processing facility located at 3576 Route 22 in Readington Township, New Jersey. This Odor Control Plan is required by the New Jersey Department of Environmental Protection (NJDEP) in conjunction with the facility's Pre-Construction Permit (PCP) application (PCP210001). The PCP was submitted to NJDEP on October 22, 2021.

The objective of this Odor Control Plan is to identify potential sources of cannabis-related odors that may be generated by the facility and outline the administrative and engineering controls that have been implemented to reduce odors at the property boundary and beyond. Verano NJ's goal is to conduct its operations such that cannabis-related odors do not travel beyond the property boundary at levels of concern.

This plan also takes into account the odor mitigation plan requirements outlined in Readington Planning Board Resolution No. 2021-02 pertaining to approval of certain improvements to the facility.

#### 2.0 FACILITY DESCRIPTION

The Verano NJ facility is a cannabis cultivation and processing center owned and operated by Verano Holdings, LLC and located at 3576 Route 22 in Readington Township, New Jersey. The facility consists of a single, approximately 120,000-square foot building located on a 38-acre parcel at the intersection of Route 22 and Island Road. The primary operations at the facility include growing cannabis plants, drying and trimming the plants, processing the dried and trimmed plants, and producing a THC extract for use in edible cannabis products. All cultivation and processing operations are performed inside the onsite building.

#### 2.1 Facility Contact Information

 Owner/Lessor: Branchburg Rte. 22, LLC 415 N. Dearborn St., 4<sup>th</sup> Floor Chicago, IL 60654

#### **ODOR MANAGEMENT PLAN**

• Lessee:

Verano NJ, LLC 415 N. Dearborn St., 4<sup>th</sup> Floor Chicago, IL 60654

- Facility Operator
   Verano NJ
   3576 Route 22
   Readington Township, NJ 07054
- Emergency Contact Information Kenneth Merced Production Manager Verano NJ (732) 766-2842
- Odor Complaint Phone Number (908) 613-8985 ext. 3003

#### 2.2 Potential Odor Sources

Areas of the facility that have the potential to generate cannabis-related odors include the following:

- Mother/Clone Rooms
- Vegetation Room
- Cultivation Room
- Wet Trim Harvest Room
- Drying Rooms
- Cure Room
- Packaging Room
- Extraction Lab
- Storage Room

While cannabis odors may be generated from the areas listed above, potential odor emission points in the building envelope are limited to the following:

 Roof top units (RTUs) that condition common areas of the buildings and certain other areas with limited odor-generating activities. These units include RTU-1, RTU-2, RTU-6, RTU-7, and RTU-8. Each RTU introduces a certain minimum rate of outside air into the building to meet applicable building code requirements. Each RTU is equipped with an economizer that, depending on weather conditions and building cooling needs, can introduce additional outside air into the building beyond that required by



#### **ODOR MANAGEMENT PLAN**

code. Air flow in the building is balanced by exhausting indoor air via the exhaust fans described below, or via barometric dampers on each RTU.

- Ceiling-mounted exhaust fans (EF-1 through EF-4) located along southwest wall of the building. These fans exhaust indoor air from the employee locker rooms and restrooms.
- Centrifugal exhaust fans installed at three locations (BEF-1, BEF-2, and BEF-3) on the south corner of the building roof. Exhaust fans BEF-1 and BEF-3 provide normal exhaust of the finishing lab and extraction rooms respectively. BEF-3 exhausts the equipment identified in the preconstruction permit application (PCP220001) as E1 CUP30 and E2 Falling Film Evaporator (FFE). Emissions from this equipment are extracted through BEF-3 (identified in the PCP as PT-1), which is equipped with a carbon filter to mitigate odors. Exhaust fan BEF-2 provides emergency exhaust of the finishing lab storage room and would only operate during emergency conditions.

Indoor air may also escape through exterior doorways or other penetrations in the building envelope; however, this air movement is anticipated to be insignificant in comparison to the volumes of air handled by the equipment listed above. Additionally, Can-Lite filters are placed at the entrance doors and loading dock to minimize odors escaping through the doors.

A site plan depicting the facility layout and potential odor emission points is provided on Figure 1.

#### 3.0 ODOR MITIGATION MEASURES

Verano NJ uses a combination of engineering controls and administrative measures to mitigate the potential for facility-related odors to reach levels of concern at and beyond the property boundaries.

#### 3.1 Engineering Controls

Engineering controls used to mitigate potential odors include the following.

#### 3.1.1 Negative Pressure

Verano NJ maintains a negative pressure in certain rooms throughout the building to reduce air flow out of each room with odor-emitting activities and thus minimize the opportunities for odors to escape the building.



## **ODOR MANAGEMENT PLAN**

Rooms with exhaust fans identified in Section 2.2 and shown in Figure 1 are kept under negative pressure.

#### **ODOR MANAGEMENT PLAN**

#### 3.1.2 Activated Carbon Filters

Verano NJ has installed activated carbon filters on the following equipment that has the potential to exhaust indoor air from the building to the outside atmosphere. The equipment locations are shown on Figure 1.

- Exhaust Fan (EF) 1
- EF-2
- EF-3
- EF-4
- Building Exhaust Fan (BEF) -1
- BEF-3
- Rooftop Unit (RTU)-1
- RTU-2
- RTU-6
- RTU-7
- RTU-8

Activated carbon filters are required to be changed at a minimum frequency of every two months, or more frequently if warranted based on inspection of the filters.

#### 3.1.3 Can-Lite Filters

Verano NJ has installed four Can-Lite Filters (14" XL 3000 CFM) at the entrance to the building and four additional Can-Lite Filters (14" XL 3000 CFM) at and near the building's enclosed loading dock. The Can-Lite Filters circulate indoor air at these locations through activated carbon filters to minimize the potential for odors to escape when personnel are entering and exiting the building. The Can-Lite Filter installation locations are identified in Figure 1.

#### 3.1.4 Additional Engineering Controls

Verano NJ has also implemented the following additional odor mitigation engineering controls:

- All duct and piping penetrations through the building enveloped are sealed airtight.
- All ductwork is sealed to Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) standards.

#### **ODOR MANAGEMENT PLAN**

• All exterior ductwork has two-inch thick fiberglass insulation and venture clad jacket.

#### 3.2 Administrative Measures

Administrative measures used to mitigate potential odors include the following.

#### 3.2.1 Employee Training

Verano NJ personnel are trained in best practices to reduce the potential for odors to emanate from the facility. Personnel are trained upon hire and on an annual basis. Topics included in the training are procedures related to carbon filter changing and recordkeeping (for applicable employees) and the importance of quickly exiting and entering the building and rooms **containing odor-generating activities while odor-emitting activities are** occurring to minimize time that doors are open. Verano NJ conducts monthly staff briefings to discuss best practices for odor mitigation.

#### 3.2.2 Monitoring and Inspection

The presence of cannabis-related odors outside of the building is monitored on a daily basis by facility personnel as they arrive at the facility and while present on the facility grounds. If pronounced cannabis odors are detected outside the building by an employee, the employee will inform the Facility Manager. The Facility Manager will initiate a further evaluation of the reported odor. If a filter needs to be changed it will be done so at this time. If doors are not closing by themselves, doors will be fixed as soon as the problem is detected.

The carbon filters are evaluated regularly for breakthrough of odors, and at a minimum on a weekly basis. Verano will replace the filters within 24 hours of discovering a filter has reached breakthrough.

#### 3.2.3 Recordkeeping

Verano NJ maintains records of the carbon filter specifications sheets and filter manufacturer's requirements. Verano NJ changes the carbon filters as required based on its monitoring activities and as recommended by the filter manufacturer. A log is maintained to document the date of each carbon filter replacement. A sample log is provided in Appendix A.



#### **ODOR MANAGEMENT PLAN**

Additionally, Verano NJ maintains records of odors noted by facility personnel during their day-to-day activities outside the building and reported to the Facility Manager as described in Section 3.2.2. Odor reports and response measures are recorded on the outdoor odor monitoring log provided in Appendix B. An entry to the log is only made for days on which an outdoor odor is reported to the Facility Manager.

#### 4.0 ODOR RESPONSE PROCEDURES

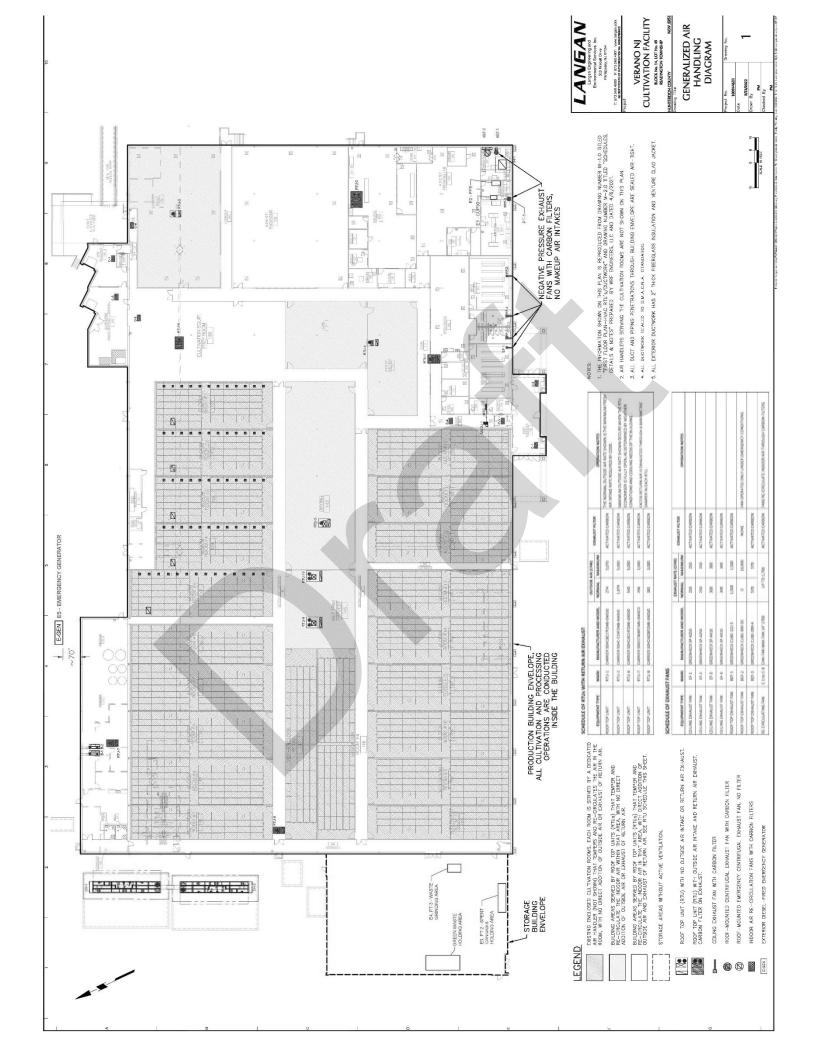
If an odor complaint is received by Verano NJ from a state or local regulatory agency, Verano NJ will implement the following response procedures:

- Verano NJ will contact the agency presenting the complaint, determine what (if any) response is required by the agency, and coordinate a site visit for agency inspectors if requested.
- Verano NJ personnel will evaluate the presence of cannabis-related odors at the property boundary and outdoor areas around the building. A description of the location, type (if possible), and degree of any odors noted will be recorded. Weather conditions (temperature, humidity, precipitation, and wind speed/direction) will also be recorded based on observation by Verano NJ personnel and online local weather data.
- If pronounced cannabis-related odors are noted at the property boundary or around the building exterior, Verano NJ personnel will further evaluate the locations where indoor air may be exhausted from the building. Observations will be recorded, and carbon filters will be replaced at any locations where cannabisrelated odors are pronounced.
- If cannabis-related odors are determined to be emanating from damaged/inoperable equipment or from locations where carbon filters are not installed, such conditions will be noted. Verano NJ will then retain the services of consultants and/or contractors to make any necessary repairs or design and implement modifications to the facility to reduce the odor emissions.
- Throughout the process described above, Verano NJ will remain in contact with the agency presenting the complaint and provide updates on the status of its evaluation and mitigation measures.



**ODOR MANAGEMENT PLAN** 

**FIGURES** 



**ODOR MANAGEMENT PLAN** 

## **APPENDIX A**

# Weekly Carbon Filter Inspection and Replacement Log

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## Weekly Carbon Filter Inspection and Replacement Log



Date	Time	Inspector (Name and Title)	Carbon Filter Location	Filter Installation Date	Odor Breakthrough (Y/N)	Filter Replaced (Y/N)	Notes
			RTU-1				
			RTU-2				
			RTU-6				
			RTU-7				
			RTU-8				
			EF-1				
			EF-2				
			EF-3				
			EF-4				
			BEF-1				
			BEF-3				
			Can-Lite #1				
			Can-Lite #2				
			Can-Lite #3				
			Can-Lite #4				
			Can-Lite #5				
			Can-Lite #6				
			Can-Lite #7				
			Can-Lite #8				

**ODOR MANAGEMENT PLA** 

## **APPENDIX B**

# **Outdoor Odor Assessment Log**

## **ODOR MANAGEMENT PLA**



## **Outdoor Odor Assessment Log**

Date	Time	Inspector (Name and Title)	<b>Odor Description</b> (location, type, strength)	Weather Conditions (temp, wind, humidity, precip.)	Known or Suspected Odor Source	Corrective Action Implemented (if any)