# **NEO Manufacturing LLC and NEO Cultivation LLC**

### 4 Marc Road

## Medway, Massachusetts

## **Noise Mitigation Plan**



#### **Noise Mitigation Plan:**

This document serves to outline the process that will be used to study the existing site and produce background information to be used to provide design guidance to meet State and Local requimrents

#### Specific noise-emitting processes:

- Cogen Equipment: These operations include generation of electrical powerwhich includes heating and cooling from reciprocating engines.
- Vegetative Rooms: These operations include Exhaust fans and HVAC equipment.
- Flower Rooms: These operations include Exhaust fans and HVACequipment.
- Harvest Rooms: These operations include Exhaust fans and HVAC equipment.
- Drying Rooms: These operations include Exhaust fans and HVAC equipment.
- Trim Rooms: These operations include Exhaust fans and HVAC equipment.
- Packaging Rooms: These operations include Exhaust fans and HVAC equipment.

#### **Noise Mitigation Best Practice:**

- Staff training procedures: NEO has an extensive training program that
  includes training specifically for noise control and maintenance and operation
  of equipment. Operating Procedures that all employees must follow. NEO will
  conduct weekly staff meetings at these meetings we discuss noise and
  maintenances of equipment.
- Monitoring and inspection: Every noise emitting room will be continuously monitored with daily inspections for noise breakout.

#### **Engineering Controls:**

The engineering noise control devices will be designed by a Professional Engineer licensed in the State of Massachusetts. An affidavit of compliance will be provided with DEP air permit.

#### **HVAC system noise control plan:**

**Closed Loop System:** with limited exhaust fitted with silencers.

- Exhaust Fans: fans will be fitted with silencing devices to prevent breakout noise.
- Cogen Equipment: Industrial grade Silencers will be installed on exhaust equipment and engines.

#### **Environmental Noise Modeling:**

Acoustical consultant of Massachusetts will be working with NEO to predict noise impacts from major mechanical equipment associated with the new facility. The acoustical consultant will develop an overall sound study plan for the project and submit final version to Medway.

#### Noise Modelina:

Environmental noise from the proposed facility will be modeled using a computerized implementation of environmental noise propagation algorithms. The potential noise impacts will be assessed at the facility property line and at the residences beyond.

#### Source Strenath:

The major noise sources will be modeled using vendor provided sound power level data in octave bands based on equipment type. This modeling analysis will be conducted to represent a worst- case scenario when all equipment operates simultaneously at full load.

#### **Design Criteria:**

Acoustical consultant will review the local and state regulation to identify an applicable design criteria against which environmental noise impacts should be compared.

Based on applicable state, local, and project-specific noise requirements and results of the baseline sound survey, recommend reasonable noise criteria for locations near the proposed project site.

Summarize the results of our baseline sound survey and present the findings and recommendations of our analysis in a concise draft report. Conduct a Best Available Noise Control Technology (BANCT) analysis and include the BANCT findings in this report.

#### Mitigation of Impacts:

The results from the assessment will be compared against applicable design criteria for the site and operations. Depending on the outcome of this work, mitigate solutions

may be necessary to reduce noise levels to acceptable levels. Solutions that will be investigated would include:

- Noise barriers
- Cladding treatments
- HVAC silencers

#### Post Construction Testing and Validation:

Post construction testing will be done to validate installation meets the noise guidance on noise performance of the facility. This post-construction test phases of the HVAC systems includes:

- Prepare and submit for review and approval a draft noise test plan review.
- Mobilize and conduct the noise testing according to the test plan.

Summarize the pertinent aspects and results of the test in a letter report, which would be intended for submission to Medway and MassDEP