



September 11, 2009

Mr. Peter C. Lowitt  
Land Use Administrator/Director  
Devens Enterprise Commission  
33 Andrews Parkway  
Devens, MA 01434

RE: Evergreen Solar Update – Noise Compliance

Dear Mr. Lowitt:

As discussed and agreed at the May 7 open meeting of the Devens Enterprise Commission (the “DEC”), Evergreen Solar is providing this update on its efforts to reduce the noise levels in the neighboring area and bring its facility into compliance with the noise ordinance. This update is also provided in satisfaction of the reporting requirements specified in Conditions No. 5 and No. 6 of the Resolution adopted by the DEC on July 14, 2009 (the “DEC Resolution”).

Noise Level Update – Our sound consultants, Cavanaugh Tocci Associates, Inc. (“CTA”), conducted 20 minute measurements for 6 hour time periods on each of September 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> at location R1. After correcting for insect noise, 37 of 54 measurements were 38dBA or less. The factory was running at full capacity during these measurement periods. These measurements were not witnessed by the DEC sound consultant but they will be verified by Modeling Specialties using their independently gathered continuous monitoring data. The results from all 54 measurements are displayed in Attachment #1. Figure 1 and figure 2 are examples of the insect correction from two of the 54 measurements, one which resulted in a 38dBA reading the other a 39dBA reading. All measurement and correction data have been delivered to the DEC under separate cover for review.

Proposed Alternative Measurement Protocol – The reference measurement protocol that we have proposed as a supplemental measurement approach to effectively demonstrate our compliance with DEC noise standard levels is still under review by the DEC’s sound consultant as well as the sound consultant now representing certain neighbors. Once that protocol is finalized a date will be set for the implementation. This will require the generation of significant noise at the facility, but we do not anticipate anything more than 65dBA at location R1 (which is the level of normal conversation). The timing of this implementation will be communicated to our neighbors and the DEC least 24 hours in advance.

Continuous Monitoring Activity Summary – CTA continues to monitor 11 locations near the Evergreen Solar facility. Six locations are adjacent to the facility on Evergreen Solar

or DEC property, four locations are on neighboring properties, one is further from the Evergreen facility and in close proximity to the railroad tracks. The continuous measurements from these unattended receptors continues to be helpful in assessing the trend of noise sources generated from the Evergreen Solar facility as well providing an indication of when non-Evergreen facility noise sources are contributing to sound levels on properties neighboring the facility.

New Monitoring Activity – On an interim basis, we have implemented a new 7x24 policy for monitoring noise at the facility that includes continuous screening of all vehicular activity accessing the rear of the plant and a continuous live patrol of the area. This allows for better control of potential noise generators. We expect to replace these monitoring activities with an automated monitoring system that is currently under review. A copy of the policy and procedure for continuous manned observation and response is attached for reference as Attachment #2.

Initial results of our additional monitoring have been very promising. A noise complaint was received on Tuesday, September 8 at 9:30 P.M.. The employee on patrol had noted a distinct increase in noise levels coming from the train yard area prior to the complaint. Facility systems were reviewed for normal operating ranges and sound spot checks confirmed that the increased sound levels had not originated from the Evergreen facility. The next day the 24-hour monitor data also confirmed the noise was not coming from the Evergreen facility.

Additional Mitigation Measures Planned – As noted in last week's update, after further review of activities at the facility we decided to add an additional ground mounted pump for deliveries of oxygen. The additional pump is now scheduled to be installed by November 25, 2009. Prior to the installation of the additional pump we expect to receive two or three more deliveries of oxygen using truck mounted pumps. The deliveries will be made during weekday, daytime hours and will be made within the temporary enclosure that is currently in place and at least 24-hour advance notifications of the deliveries shall be provided to our neighbors and the DEC per the noise notification protocol.

Deliberate Noise Notification Protocol. A Deliberate Noise Notification Protocol was established to formalize the notification of our neighbors and the DEC of activities or occurrences that will or might cause facility noise to exceed any applicable facility noise restrictions. This protocol was provided earlier today and we understand it will be published on the DEC's website.

We will continue to work diligently to demonstrate nighttime compliance levels, install the additional ground mounted pump, implement the new noise measurement protocol, complete the 'worst case' test and otherwise fulfill all of our obligations under the DEC Resolution and the

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DEC regulations. We will take additional compliance measurements this weekend with the DEC sound consultant present.

Sincerely,

Carl Stegerwald

CC:  
Christian Ehrbar  
Phil McRae  
Brian LaValley  
Tom Cusson – MA DEP

**Attachment 1**

**Evergreen Solar Noise Measurement Results – September 5-7, 2009**

**Evergreen Solar - Dunroven Farm Horse Trail (R1)**

**Summary of 20-minute Sound Monitoring**

September 5 - 7, 2009 (12 Noon to 6 PM)

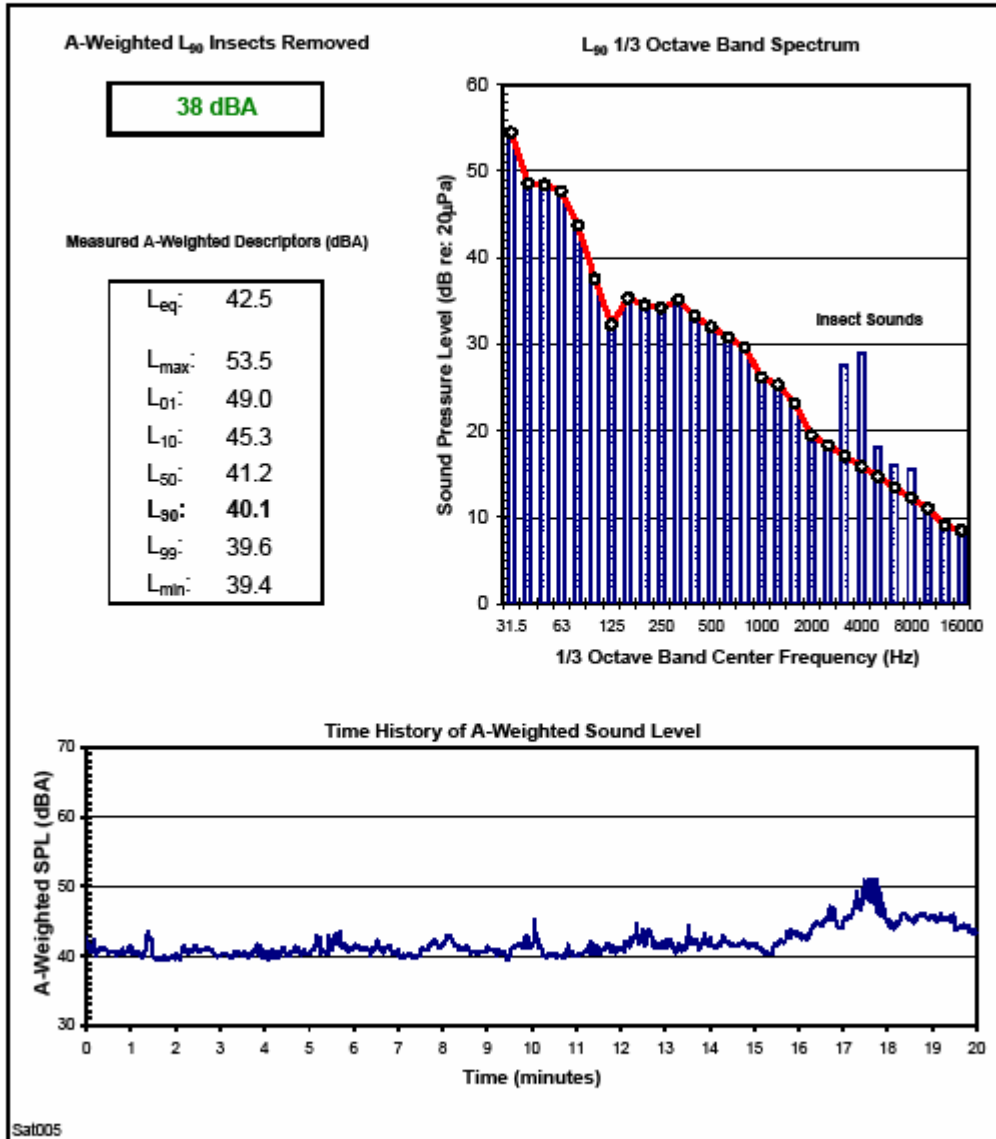
Date	Start Time	Measured L <sub>90</sub> (dBA)	L <sub>90</sub> (dBA)	Equipment Operating Ranges for measurement period			
			Insect Sounds Removed	Cooling Towers	NOX Scrubber	VOC Scrubber	ASX Scrubber
Saturday, September 05, 2009	12:01 PM	38.8	37	25-35%	50-54%	60-66%	70-88%
	12:21 PM	38.5	38				
	12:41 PM	38.7	38				
	1:01 PM	40.6	39				
	1:21 PM	40.1	38				
	1:41 PM	40.5	39				
	2:01 PM	40.8	39				
	2:21 PM	40.3	39				
	2:41 PM	40.9	39				
	3:01 PM	40.2	39				
	3:21 PM	41.3	39				
	3:41 PM	40.2	39				
	4:01 PM	41.0	39				
	4:21 PM	41.8	40				
	4:41 PM	41.2	39				
5:01 PM	40.2	38					
5:21 PM	41.0	40					
5:41 PM	41.1	39					
Sunday, September 06, 2009	12:00 PM	40.5	39	25-35%	50-54%	60-66%	70-88%
	12:20 PM	40.4	39				
	12:40 PM	39.7	38				
	1:00 PM	40.2	39				
	1:20 PM	40.7	39				
	1:40 PM	40.1	38				
	2:00 PM	39.6	38				
	2:20 PM	39.6	38				
	2:40 PM	39.6	38				
	3:00 PM	39.8	38				
	3:20 PM	40.1	38				
	3:40 PM	39.4	38				
	4:00 PM	39.9	38				
	4:20 PM	40.2	38				
	4:40 PM	40.0	38				
5:00 PM	39.5	38					
5:20 PM	40.1	38					
5:40 PM	40.1	38					
Monday, September 07, 2009	12:00 PM	38.9	36	30-45%	50-54%	60-66%	70-88%
	12:20 PM	39.7	37				
	12:40 PM	39.9	37				
	1:00 PM	40.1	38				
	1:20 PM	39.5	37				
	1:40 PM	39.8	38				
	2:00 PM	39.8	38				
	2:20 PM	40.3	38				
	2:40 PM	39.9	38				
	3:23 PM	40.0	38				
	3:43 PM	40.3	37				
	4:03 PM	41.0	38				
	4:23 PM	40.9	37				
	4:43 PM	39.4	37				
	5:03 PM	39.6	37				
5:23 PM	39.6	37					
5:43 PM	39.0	37					

**Figure 1**

CAVANAUGH TOCCI ASSOCIATES, INC.

**Evergreen Solar - Dunroven Farm Horse Trail (R1)**

Measured Saturday, September 05, 2009, Between 1:21 PM & 1:41 PM

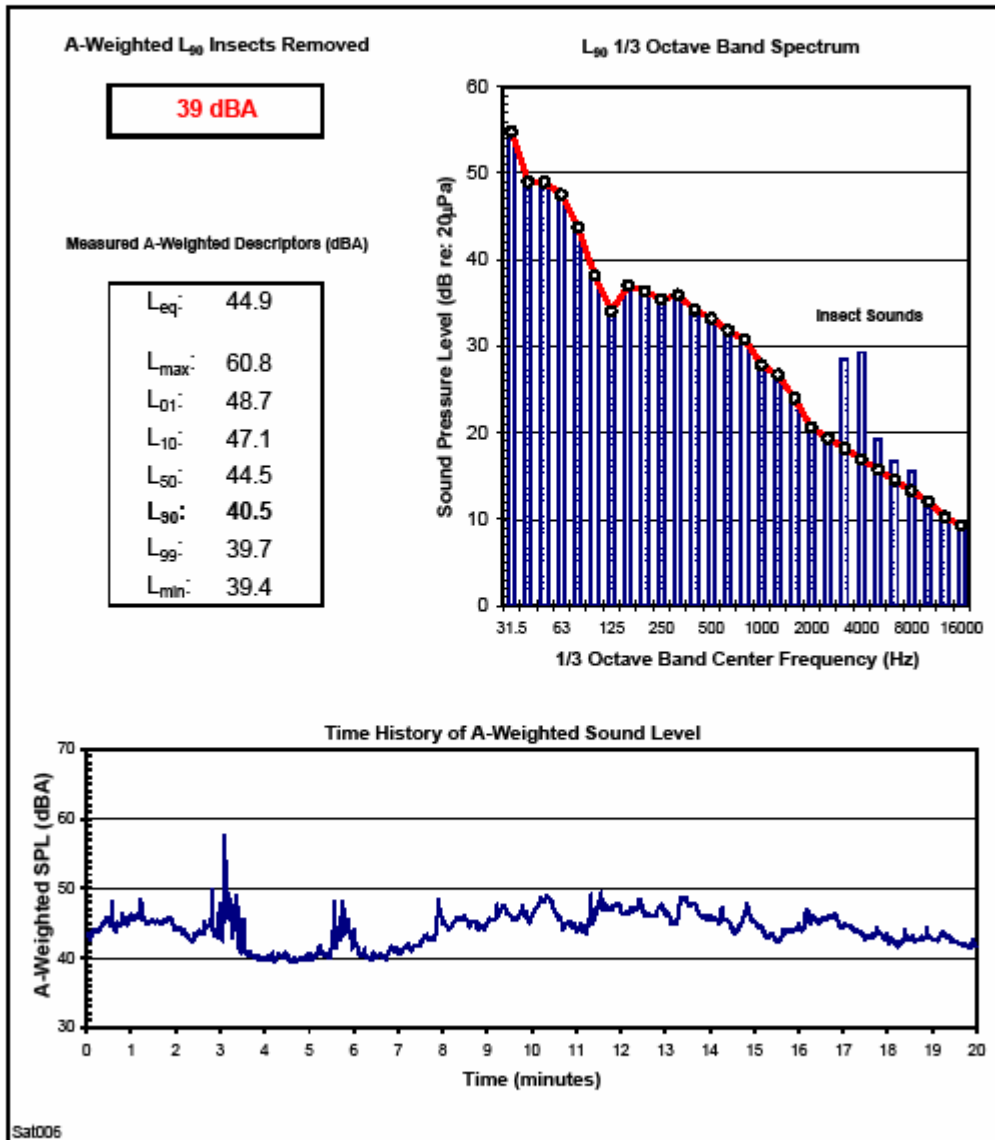


**Figure 2**

CAVANAUGH TOCCI ASSOCIATES, INC.

**Evergreen Solar - Dunroven Farm Horse Trail (R1)**

Measured Saturday, September 05, 2009, Between 1:41 PM & 2:01 PM



## Attachment 2

### Evergreen Solar Noise Monitoring Policy



## Noise Monitoring Patrol and FMS Monitoring of Noise

### FMS Screen operator duties

- Carry and monitor a radio
- Monitor the operating parameters of all equipment, including but not limited to fans, motors, cooling towers. Please refer to the list of equipment posted in the control room for these parameters.
- If parameters are out of spec-immediately alert the foot patrol person and facilities personnel to investigate and address the issue AND follow the escalation chart to contact management.
- The primary way to address the issue is to use system redundancy. Turn on the redundant part of the system and shut down the offending piece of equipment. If redundancy does not exist, revert to the escalation chart a second time for a decision.
- If you receive a call from either of the 2 foot patrols – immediately use the escalation chart to contact Management.

### Foot patrol noise monitor duties

- Carry and monitor a radio and the dedicated cell phone
- If you notice ANY additional noise being generated outside normal sounds you must immediately contact FMS to attempt to determine the source and attempt to address the issue. The primary way to address the issue is to use system redundancy. Have FMS operator turn on the redundant part of the system and shut down the offending piece of equipment. If redundancy does not exist, have the FMS operator revert to the escalation chart a second time for a decision.
- Sounds outside the normal might be: (not an exhaustive list)
  - Knocking sounds from fans or motors
  - Whining or screaming sounds
  - Loud exhaust noises
  - Tapping sounds

### Gas pad noise monitor

- Carry and monitor a radio
- Control access of ALL trucks to the site. Question the driver as to their reason for entering the site and what possible noise they could generate. If unsure or need guidance use the escalation chart to get a decision.
- Monitor the gas pad tanks for Automatic pressure reliefs (any venting of gas) – Immediately use the escalation chart to notify management.
- If unsure of anything use the escalation chart to contact a manager.
  - From 8am – 4pm Monday-Sunday - Gas Deliveries are permitted. Outside these hours they must be turned back. No exceptions.
  - All other warehouse vehicles are permitted to access the warehouse 5am-7pm
  - Emergency deliveries to the warehouse from the likes of UPS/Fedex etc are allowed around the clock 24/7 but must not be allowed to generate excessive noise- no unnecessary use of air brakes or idling.
- **In the event of a site emergency - IMMEDIATELY REMOVE JERSEY BARRIERS AND AID ENTRY OF FIRE TRUCKS AND FIRE FIGHTING EQUIPMENT.**

#### General Guidelines

- Be aware of your surroundings at all times
  - Dress appropriately for the weather
    - Use sunscreen during the day
- Stay alert and hydrated-there will be a cooler for water in the compressor room
  - Wear reflective vest at night
    - Carry a flashlight at night
- For toilet breaks you must have a stand in

