

SDOT Noise Variance Compliance Assessment Report #70

Reporting Date Range:	8/20/12 – 8/26/12
------------------------------	-------------------

Project Summary

Variance # and Type:	3011335, Major Public Project Construction Variance
Variance Holder:	Seattle Department of Transportation
Project Name:	Mercer Corridor Improvements Project, East Phase
Contractor:	Gary Merlino Construction Company
Sound Monitoring Firm:	The Greenbusch Group, Inc.

Assessment Summary

Hourly sound level data was reviewed in accordance with the established protocol to determine the variance exceedances identified herein.

Number of Exceedances:	Residence Inn (08/20-23/12)	Residence Inn (8/24/12 – 8/26/12)	
	0 (NONE)	0 (NONE)	
Number of Noise Complaints:	Project Hotline	DPD Hotline	DPD E-mail
	7	0 (NONE)	0 (NONE)

Variance Exceedance Details (All Sound Levels Hourly L₀₁)

Date:	N/A	Hourly Period:	N/A
Commercial Sound Level Limit:	85 dBA	Measured Sound Level:	< 85 dBA
Duration Residential Sound Levels from Site Emissions Were Above 85 dBA			N/A

No exceedances were measured during this reporting period.

Noise Complaint Details

Date:	08/21/12	Complaint #:	082112-1	Time:	10:10 pm
Complainant:	Front Desk			Location:	Residence Inn
Complaint Associated with Noise Source Resulting in Exceedance?					No

The Front Desk called the Project Hotline and reported guests were submitting general noise complaints. The INM mobilized to the site, arriving at 10:30 pm, and remained for one hour to observe construction activities; no violations were observed during this visit. The INM followed up with the Front Desk during daytime hours and confirmed the complaints were of general noise levels and not a specific activity. Sound recordings were reviewed during all periods of complaint and indicated significant amount of truck activity on the site, which confirms the General Contractor's mention there was truck activity on Valley, which was likely the cause of the complaints. No disallowed activities were identified in the sound recordings.

Completed by:	Adam C. Jenkins, PE(OR), INCE Bd. Cert.	Date:	08/31/12
----------------------	---	--------------	----------

SDOT Noise Variance Compliance Assessment Report #70

Date:	08/22/12	Complaint #:	082212-1	Time:	3:00 am
Complainant:	Front Desk			Location:	Residence Inn
Complaint Associated with Noise Source Resulting in Exceedance?					No

The Front Desk called the Project Hotline at 3:00 am and reported guests were submitting general noise complaints. There was an issue with the Project Hotline, and the noise complaint was not forwarded to the INM for response. INM investigation occurred parallel to Complaint 082112-1.

Date:	08/22/12	Complaint #:	082212-2	Time:	5:00 am
Complainant:	Front Desk			Location:	Residence Inn
Complaint Associated with Noise Source Resulting in Exceedance?					No

The Front Desk called the Project Hotline and reported guests were submitting general noise complaints. There was an issue with the Project Hotline, and the noise complaint was not forwarded to the INM for response. INM investigation occurred parallel to Complaint 082112-1.

Date:	08/24/12	Complaint #:	082412-1	Time:	12:10 am
Complainant:	Front Desk			Location:	Residence Inn
Complaint Associated with Noise Source Resulting in Exceedance?					N/A (no monitoring performed)

The Front Desk called the Project Hotline to report that three guests complained about rattling noise from trucks. The INM visited the site at 12:30 am and remained for one hour. During the visit, the only active construction equipment was a backhoe doing some grading work on west side of Fairview. The INM spoke with site on-site RE and was told the contractor was using vibratory roller on Valley around 12:00 am for 5 minutes, had an active backup alarm (no indication of tonal or broadband), and ran it on a steel plate a few times while performing some concrete patch work. The on-site RE indicated this activity is probably what generated the complaints. When the INM left the site at 1:30, all backhoe work had stopped and hand tools were being used for grading and cleanup.

Date:	08/25/12	Complaint #:	082512-1	Time:	3:45 am
Complainant:	Front Desk			Location:	Residence Inn
Complaint Associated with Noise Source Resulting in Exceedance?					No

The Front Desk called the Project Hotlines relaying a guest complaint of a "banging noise." The INM visited the site at 4:15 am, no construction work was occurring. An excavation crew started arriving in area at 4:30 am, and they indicated the noise was most likely from the crew that removed a utility pole earlier that night to prepare for the utility vault excavation work. The INM remained on-site until 5:30 am and observed excavation for the utility vault starting at 5:00 am. The excavation crew made good efforts to keep noise down by removing of concrete earlier in the day, maintaining dirt beds in the haul trucks, and noise-conscious operation of the excavator. During complaint follow-up, the INM listened to sound recordings around the complaint time and heard banging noises around 3:40 AM, but it was not clear what the source of the noise was. During another site visit, the General Contractor indicated that

Completed by:	Adam C. Jenkins, PE(OR), INCE Bd. Cert.	Date:	08/31/12
----------------------	---	--------------	----------

SDOT Noise Variance Compliance Assessment Report #70

the utility pole removal crew dropped some signs that were suspended from a cable attached to the utility pole that was being removed; this event is likely the source of complaint.

Date:	08/25/12	Complaint #:	082512-2	Time:	11:45 PM
Complainant:	Guest			Location:	Residence Inn
Complaint Associated with Noise Source Resulting in Exceedance?					No

A hotel guest called the Project Hotline complaining about backup alarms. The INM arrived on-site around 12:15 am and remained for one hour. During the visit, the INM observed two vactor trucks performing emergency cleanup of CDF that flowed into a sanitary sewer line after it was damaged during removal of temporary shoring. Vactor truck sound emissions were not tonal in nature, but were similar to a higher speed engine idle. No tonal backup alarms were observed. The INM also spoke with staff at the Front Desk, they indicated that no noise complaints had been reported that night.

Date:	08/26/12	Complaint #:	082612-1	Time:	3:40 am and 6:30 am
Complainant:	Guest			Location:	Residence Inn
Complaint Associated with Noise Source Resulting in Exceedance?					No

A hotel guest called the Project Hotline twice complaining about idling engine noise. There was a technical issue with the INM cell phone, so investigatory site visits were not conducted. However, the INM reached the complainant for follow-up and confirmed the complaint was related to the vactor trucks on-site, which were also observed during the investigatory site visit for complaint 082512-2. The INM reviewed sound recordings surrounding the complaint periods and confirmed the sound was from the vactor trucks and did appear to have a tonal component, but not sufficient in level to exceed the Variance sound level limits.

General Notes and Observations:

Monitoring was conducted during nighttime work hours to assess compliance with Variance limits by measuring sound levels at the nearest sensitive receiver. Nighttime construction activities near sensitive receivers included storm drainage work, vault installation, and emergency cleanup of CDF overflow into a sanitary sewer line near Valley and Fairview.

In addition to the investigatory site visits described in the previous Section, routine site visits were conducted on Monday 8/20 at 10:30 pm and Friday 08/24 at 12:30 pm; all activities were compliant with Variance conditions.

Completed by:	Adam C. Jenkins, PE(OR), INCE Bd. Cert.	Date:	08/31/12
----------------------	---	--------------	----------