

November 6, 2006

Halah Voges
The RETEC Group, Inc.
1011 SW Klickitat Way, Suite 207
Seattle, Washington 98134-1162

**RE: WEEKLY AIR AND NOISE MONITORING REPORT
OCTOBER 16 – OCTOBER 20, 2006
Levee Zone Interim Action
Skykomish, Washington**

Ms. Voges,

This document represents the twenty-first report of weekly air and noise monitoring data for the BNSF Skykomish levee zone interim action for the town of Skykomish, Washington conducted by Argus Pacific, Inc. (Argus Pacific) during the week of October 16 through October 20, 2006. The purpose of this report is to summarize and interpret air and noise sampling data collected in the town of Skykomish during the levee zone interim action conducted by The RETEC Group (RETEC). Argus Pacific conducted monitoring in accordance with the revised BNSF Skykomish Air and Noise Monitoring Plan issued by Argus Pacific on September 19, 2006.

WORK ACTIVITIES

Argus Pacific collected chemical samples and noise measurements on October 16 and 19, 2006. No respirable dust samples were taken on either of these two days due to heavy and persistent rain. RETEC technicians collected noise measurements on October 17, 18, and 20 of that week. Respirable dust samples were only collected on October 20, 2006 due to heavy and persistent rain during the rest of the week.

During sampling, workers excavated materials around the perimeter of the levee zone south of the river for shoring wall installation. Backfilling materials were imported and backfilling activities continued throughout the levee zone. Workers continued with storm sewer catch basin installation in the levee zone. Workers continued grading and compacting backfilled areas. Loaders loaded railcars with impacted materials from the railyard stockpiles.

SAMPLING METHODOLOGY

All samples were collected in accordance with the methods specified in the BNSF Skykomish Air and Noise Monitoring Plan. Please refer to this Plan for specific details on sampling methodology.

On October 16, 2006, Argus Pacific collected air samples at the east end of the railyard (on ladder between eastern-most railcar and east end of railyard stockpiles) in a downwind direction relative to construction activities. Air samples were also collected at the northeast corner of the schoolyard, not directly downwind of construction activities, but immediately adjacent to the primary area of excavation and truck traffic. Samples taken on October 16, 2006 at these two locations were analyzed for lead, arsenic, petroleum hydrocarbons (Naphthas), diesel particulate matter, and polynuclear aromatic hydrocarbons (PAHs). Air samples were also taken inside the school building (third floor, northeast room). Samples taken on October 16, 2006 inside the school building were analyzed for petroleum hydrocarbons (Naphthas) and polynuclear aromatic hydrocarbons (PAHs).

On October 19, 2006, Argus Pacific collected air samples at the east end of the railyard, the northeast corner of the schoolyard, and inside the school building. Samples collected on October 19, 2006 from the railyard and schoolyard were analyzed for lead, arsenic, and petroleum hydrocarbons (Naphthas). The samples collected on October 19, 2006 inside the school were analyzed for petroleum hydrocarbons (Naphthas) and polynuclear aromatic hydrocarbons (PAHs).

Argus Pacific also conducted community noise monitoring at the northwest corner of the railyard (just north of railroad tracks on the corner of Railroad Avenue and North 5th Street), and at the northeast corner of the schoolyard, immediately adjacent to the primary area of excavation and truck traffic. Argus Pacific conducted no respirable dust monitoring this week due to heavy and persistent rain on October 16 and 19, 2006. On days during the week when Argus Pacific was not on site (October 17, 18, and 20), RETEC technicians conducted community noise monitoring at the northwest corner of the railyard and the northeast corner of the schoolyard. RETEC technicians conducted respirable dust monitoring at the northwest corner of the railyard, the northeast corner of the schoolyard, and on the south side of the bridge on October 20, 2006. RETEC technicians did not collect respirable dust samples on October 17 or 18, 2006 due to heavy and persistent rain.

Approximate air and noise sample locations are indicated on the attached Air and Noise Monitoring Sample Locations Plan.

SAMPLING RESULTS

Detectable concentrations of diesel particulate matter were found in the samples collected at both the east end of the railyard and the northeast corner of the schoolyard on October 16, 2006. Also, a detectable concentration of polynuclear aromatic hydrocarbons (PAHs) was identified inside the school building on October 16, 2006. However, polynuclear aromatic hydrocarbons were not detected outside of the school (northeast corner) on the same day. None of the other target compounds were identified at or above the laboratory limits of detection at any of the three sampling stations. Respirable dust concentrations and community noise levels were below project action limits during sampling for the entire week. Laboratory results, and dust and noise monitoring data are attached.

OCTOBER 16, 2006

RAILYARD (EAST END) SAMPLES – HAULING AND STOCKPILING OF DIRT, LOADING EXCAVATED/IMPACTED MATERIALS INTO RAILCARS

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
1016-ERY-LA	Lead	483 minutes	2.1 µg/m ³	<2.1 µg/m ³	50 µg/m ³
	Arsenic	483 minutes	3.1 µg/m ³	<3.1 µg/m ³	10 µg/m ³
1016-FB-LA	Lead	Field Blank	2.0 µg/sample	ND	NA
	Arsenic	Field Blank	3.0 µg/sample	ND	NA
1016-ERY-N	Naphthas	483 minutes	0.52 mg/m ³	<0.52 mg/m ³	100 mg/m ³
1016-FB-N	Naphthas	Field Blank	0.01 mg/sample	ND	NA
1016-ERY-DPM	Diesel Particulate (as Elemental Carbon)	483 minutes	1.7 µg/m ³	1.8 µg/m ³	20 µg/m ³
1016-FB-DPM	Diesel Particulate (as Elemental Carbon)	Field Blank	1.7 µg/sample	ND	NA
1016-ERY-PAH	PAHs (as benzene solubles)	483 minutes	0.04 mg/m ³	<0.04 mg/m ³	0.2 mg/m ³
1016-FB-PAH	PAHs (as benzene solubles)	Field Blank	0.04 mg/m ³	ND	NA

ND = Non-Detect

SCHOOLYARD (NE CORNER) SAMPLES – EXCAVATING, HAULING DIRT, BACKFILLING, SHORING WALL INSTALLATION, STORM SEWER CATCH BASIN INSTALLATION

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
1016-NSY-LA	Lead	490 minutes	2.0 µg/m ³	<2.0 µg/m ³	50 µg/m ³
	Arsenic	490 minutes	3.1 µg/m ³	<3.1 µg/m ³	10 µg/m ³
1016-NSY-N	Naphthas	490 minutes	0.51 mg/m ³	<0.51 mg/m ³	100 mg/m ³
1016-NSY-DPM	Diesel Particulate (as Elemental Carbon)	490 minutes	1.7 µg/m ³	3.2 µg/m ³	20 µg/m ³
1016-NSY-PAH	PAHs (as benzene solubles)	490 minutes	0.04 mg/m ³	<0.04 mg/m ³	0.2 mg/m ³

INSIDE SCHOOL BUILDING (THIRD FLOOR, NE ROOM) SAMPLES – EXCAVATING, HAULING DIRT, BACKFILLING, SHORING WALL INSTALLATION, STORM SEWER CATCH BASIN INSTALLATION

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
1016-ISB-N	Naphthas	480 minutes	0.52 mg/m ³	<0.52 mg/m ³	100 mg/m ³
1016-ISB-PAH	PAHs (as benzene solubles)	480 minutes	0.04 mg/m ³	0.06 mg/m³	0.2 mg/m ³

OCTOBER 19, 2006

RAILYARD (EAST END) SAMPLES – HAULING AND STOCKPILING OF DIRT, LOADING OF EXCAVATED MATERIALS INTO RAILCARS

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
1019-ERY-LA	Lead	495 minutes	2.0 µg/m ³	<2.0 µg/m ³	50 µg/m ³
	Arsenic	495 minutes	3.0 µg/m ³	<3.0 µg/m ³	10 µg/m ³
1019-ERY-N	Naphthas	495 minutes	0.51 mg/m ³	<0.51 mg/m ³	100 mg/m ³

SCHOOLYARD (NE CORNER) SAMPLES – EXCAVATING, HAULING DIRT, BACKFILLING SHORING WALL INSTALLATION, STORM SEWER CATCH BASIN INSTALLATION

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
1019-NSY-LA	Lead	510 minutes	2.0 µg/m ³	<2.0 µg/m ³	50 µg/m ³
	Arsenic	510 minutes	2.9 µg/m ³	<2.9 µg/m ³	10 µg/m ³
1019-NSY-N	Naphthas	510 minutes	0.49 mg/m ³	<0.49 mg/m ³	100 mg/m ³

INSIDE SCHOOL BUILDING (THIRD FLOOR, NE ROOM) SAMPLES – EXCAVATING, HAULING DIRT, BACKFILLING, SHORING WALL INSTALLATION, STORM SEWER CATCH BASIN INSTALLATION

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
1019-ISB-N	Naphthas	510 minutes	0.48 mg/m ³	<0.48 mg/m ³	100 mg/m ³
1019-ISB-PAH	PAHs (as benzene solubles)	510 minutes	0.04 mg/m ³	<0.04 mg/m ³	0.2 mg/m ³

OCTOBER 20, 2006

RESPIRABLE DUST MONITORING RESULTS – RAILYARD (EAST END)

SAMPLE NUMBERS	DATE SAMPLE COLLECTED	PEAK CONCENTRATION (ONE MINUTE)	AVERAGE CONCENTRATION	MONITORING PLAN LIMIT
DataRam4, Serial #D417 Tag 030	October 20, 2006	14 µg/m ³	4.2 µg/m ³	5,000 µg/m ³

RESPIRABLE DUST MONITORING RESULTS – NE SCHOOLYARD

SAMPLE NUMBERS	DATE SAMPLE COLLECTED	PEAK CONCENTRATION (ONE MINUTE)	AVERAGE CONCENTRATION	MONITORING PLAN LIMIT
DataRam4, Serial #D416 Tag 030	October 20, 2006	209 µg/m ³	6.2 µg/m ³	5,000 µg/m ³

RESPIRABLE DUST MONITORING RESULTS – BRIDGE

SAMPLE NUMBERS	DATE SAMPLE COLLECTED	PEAK CONCENTRATION (ONE MINUTE)	AVERAGE CONCENTRATION	MONITORING PLAN LIMIT
DataRam4, Serial #D495 Tag 18	October 20, 2006	144 µg/m ³	9.2 µg/m ³	5,000 µg/m ³

COMMUNITY NOISE MONITORING – RAILYARD

DATE OF MONITORING	AVERAGE NOISE LEVEL	MAXIMUM NOISE LEVEL	MONITORING PLAN LIMIT
October 16, 2006	77.6 dB	113.3 dB	85 dB
October 17, 2006	78.4 dB	114.0 dB	
October 18, 2006	78.2 dB	113.9 dB	
October 19, 2006	77.6 dB	114.9 dB	
October 20, 2006	77.2 dB	113.8 dB	

COMMUNITY NOISE MONITORING – NE SCHOOLYARD

DATE OF MONITORING	AVERAGE NOISE LEVEL	MAXIMUM NOISE LEVEL	MONITORING PLAN LIMIT
October 16, 2006	70.0 dB	95.8 dB	80 dB
October 17, 2006	74.2 dB	97.7 dB	
October 18, 2006	73.6 dB	97.6 dB	
October 19, 2006	71.0 dB	99.0 dB	
October 20, 2006	72.8 dB	101.4 dB	

CONCLUSIONS

Based on this data, the excavating, dirt hauling, backfilling, shoring wall and storm sewer catch basin installation, and loading of impacted materials into railcars conducted from October 16 through October 20, 2006 did not release the contaminants of concern or respirable dust in concentrations above the project action limits specified in the BNSF Skykomish Air and Noise Monitoring Plan for the areas monitored.

Also, the source of the PAHs detected inside the school building on October 16, 2006 was most likely located inside the school because no PAHs were detected outside of the school (northeast corner of the schoolyard) on that same day.

The average noise levels documented from October 16 to October 20, 2006 were below the project action limit for community noise in the areas monitored. Maximum noise levels were recorded above the project action level at both locations; however, these exceedances were for extremely short durations and occurred when BNSF trains passed through the town and during some heavy equipment operations.

Although the elevated noise limits are above the project action limit, they do not exceed the King County Noise Code or the Skykomish Municipal Noise Code, which allow for any source of construction noise that is of short duration to be increased by:

- 5 dB(A) for a total of fifteen minutes in any one-hour period; or
- 10 dB(A) for a total of five minutes in any one-hour period; or
- 15 dB(A) for a total of one and one-half minutes in any one-hour period.

All readings greater than 100 dB for the railyard and schoolyard monitoring stations were instantaneous readings that occurred while a train passed through town. Since train noise is exempt from the applicable noise codes, no exceedances of County or Municipal Code were recorded at either location during the monitoring period.

We appreciate this opportunity to be of service to you. Please contact us at (206) 285-3373 if you have questions regarding this report, or if you require additional information.

Sincerely,

S. Rinear / by me
Scott Rinear
Industrial Hygienist

Reviewed by,

E. Black / by me
Elisabeth Black, CIH
Argus Pacific, Inc.

Attachments:

Air and Noise Monitoring Sample Locations Plan (10/16/06 to 10/20/06)

Laboratory Certificates of Analysis

DataChem Laboratories, Batch #06I-5701-01
DataChem Laboratories, Batch #06I-5701-02
DataChem Laboratories, Batch #06I-5701-03
DataChem Laboratories, Batch #06I-5701-04
DataChem Laboratories, Batch #06I-5662-01
DataChem Laboratories, Batch #06I-5662-02
DataChem Laboratories, Batch #06I-5662-04

DataRam4 data for instrument D-417 (10/20/06)
DataRam4 data for instrument D-416 (10/20/06)
DataRam4 data for instrument D-495 (10/20/06)

Larson Davis 820 Noise Data – East Railyard (10/16/06 – 10/20/06)
Larson Davis 820 Noise Data – Northeast Schoolyard (10/16/06 – 10/20/06)