ARGUS PACIFIC
SAFETY • TRAINING • INDUSTRIAL HYGIENE

August 23, 2006

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

RE: WEEKLY AIR MONITORING REPORT
JULY 17 - JULY 22, 2006
Levee Zone Interim Action
Skykomish, Washington

Ms. Voges,

This document represents the eighth 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 July 17 through July 22, 2006. The purpose of this report is to summarize and interpret air and noise monitoring data collected in the City of Skykomish during the levee zone interim action conducted by The RETEC Group (RETEC). Argus Pacific conducted the monitoring in accordance with the BNSF Skykomish Air and Noise Monitoring Plan issued by Argus Pacific on June 20, 2006.

WORK ACTIVITIES

Argus Pacific collected chemical and respirable dust samples and noise measurements on July 18 and July 20, 2006. RETEC technicians collected respirable dust samples and noise measurements on July 17, 19, 21, and 22 of that week.

During sampling, workers filled sand bags in the river, moved and hauled dirt from the levee to the railyard, and screened dirt at the railyard. A water truck wetted roadways and a street sweeper removed rocks from the roadway.

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 July 18, 2006, Argus Pacific collected air samples at the northwest corner of the railyard and on the west side of the bridge directly east of the excavation. Samples were analyzed for lead, arsenic, petroleum hydrocarbons (Naphthas), polynuclear aromatic hydrocarbons (PAHs), and diesel particulate. On July 20, 2006, Argus Pacific collected samples for lead, arsenic, and Naphthas in the same locations.

Argus Pacific also conducted respirable dust monitoring and community noise monitoring at both of the aforementioned locations. On days during the week that Argus Pacific was not on site (July 17, 19, 21, and 22), RETEC employees conducted respirable dust monitoring and community noise monitoring at the railyard and bridge. Argus Pacific and RETEC collected noise measurements using a Quest handheld sound level meter during construction and equipment operations from July 17 through 22, 2006.

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

SAMPLING RESULTS

None of the target compounds were identified at or above the laboratory limit of detection at either of the two sampling stations on either of the two days Argus Pacific conducted sampling. Respirable dust concentrations and community noise levels were below project action limits. Laboratory results and dust and noise monitoring data are included as attachments.

JULY 18, 2006

RAILYARD SAMPLES – SCREENING AND HAULING DIRT

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
0718-RY-LA	Lead	496 minutes	2.0 µg/m^3	<2.0 µg/m^3	50 µg/m^3
	Arsenic	496 minutes	2.0 µg/m^3	<2.0 µg/m^3	10 µg/m^3
0718-FB-LA	Lead	Field Blank	2.0 µg/sample	ND	NA
	Arsenic	Field Blank	2.0 µg/sample	ND	NA
0718-RY-N	Naphthas	496 minutes	0.50 mg/m^3	<0.50 mg/m^3	100 mg/m^3
0718-FB-N	Naphthas	Field Blank	0.01 mg/sample	ND	NA
0718-RY-DP	Diesel Particulate (as Elemental Carbon)	496 minutes	1.3 µg/m^3	<1.3 µg/m^3	20 µg/m^3
0718-FB-DP	Diesel Particulate (as Elemental Carbon)	Field Blank	1.3 µg/sample	ND	NA
0718-RY-PAH	PAHs (as benzene solubles)	496 minutes	0.0003 mg/m^3	<0.0003 mg/m^3	0.2 mg/m^3
0718-FB-PAH	PAHs (as benzene solubles)	Field Blank	0.6 mg/sample	ND	NA

BRIDGE SAMPLES – FILLING SANDBAGS, HAULING DIRT

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
0718-B-LA	Lead	496 minutes	2.0 µg/m^3	<2.0 µg/m^3	50 µg/m^3
	Arsenic	496 minutes	2.0 µg/m^3	<2.0 µg/m^3	10 µg/m^3
0718-B-N	Naphthas	496 minutes	0.50 mg/m^3	<0.50 mg/m^3	100 mg/m^3
0718-B-DP	Diesel Particulate (as Elemental Carbon)	496 minutes	1.3 µg/m^3	<1.3 µg/m^3	20 µg/m^3
0718-B-PAH	PAHs (as benzene solubles)	496 minutes	0.0003 mg/m^3	<0.0003 mg/m^3	0.2 mg/m^3

JULY 20, 2006

RAILYARD SAMPLES – SCREENING AND HAULING DIRT

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
0720-RY-LA	Lead	491 minutes	2.0 µg/m^3	<2.0 µg/m^3	50 µg/m^3
	Arsenic	491 minutes	3.1 µg/m^3	<3.1 µg/m^3	10 µg/m^3
0720-RY-N	Naphthas	491 minutes	0.51 mg/m^3	<0.51 mg/m^3	100 mg/m^3

BRIDGE SAMPLES – FILLING SANDBAGS, HAULING DIRT

SAMPLE ID	COMPOUND	SAMPLE TIME	LIMIT OF DETECTION	RESULT	MONITORING PLAN LIMIT
0720-B-LA	Lead	495 minutes	2.0 µg/m^3	<2.0 µg/m^3	50 µg/m^3
	Arsenic	495 minutes	3.1 µg/m^3	<3.1 µg/m^3	10 µg/m^3
0720-B-N	Naphthas	495 minutes	0.51 mg/m^3	<0.51 mg/m^3	100 mg/m^3

JULY 17 THROUGH JULY 22, 2006

RESPIRABLE DUST MONITORING RESULTS - RAILYARD

SAMPLE NUMBERS	DATE SAMPLE COLLECTED	PEAK CONCENTRATION (ONE MINUTE)	AVERAGE CONCENTRATION	MONITORING PLAN LIMIT
DataRam4, Serial #D417 Tag #31	July 17, 2006	55 µg/m^3	8.0 µg/m^3	5,000 µg/m^3
DataRam4, Serial #D417 Tag #32	July 18, 2006	72 µg/m^3	7.0 µg/m^3	
DataRam4, Serial #D417 Tag #33	July 19, 2006	72 µg/m^3	7.7 µg/m^3	
DataRam4, Serial #D417 Tag #34	July 20, 2006	109 µg/m^3	9.6 µg/m^3	
DataRam4, Serial #D417 Tag #35	July 21, 2006	161 µg/m^3	10 µg/m^3	
DataRam4, Serial #D417 Tag #36	July 22, 2006	73 µg/m^3	16 µg/m^3	

RESPIRABLE DUST MONITORING RESULTS – BRIDGE

SAMPLE NUMBERS	DATE SAMPLE COLLECTED	PEAK CONCENTRATION (ONE MINUTE)	AVERAGE CONCENTRATION	MONITORING PLAN LIMIT
DataRam4, Serial #D416 Tag 18	July 18, 2006	38 $\mu g/m^3$	4.2 $\mu g/m^3$	5,000 $\mu g/m^3$
DataRam4, Serial #D416 Tag 19	July 19, 2006	66 $\mu g/m^3$	6.2 $\mu g/m^3$	
DataRam4, Serial #D416 Tag 20	July 20, 2006	260 $\mu g/m^3$	10.7 $\mu g/m^3$	
DataRam4, Serial #D416 Tag 21	July 21, 2006	75 $\mu g/m^3$	13 $\mu g/m^3$	
DataRam4, Serial #D416 Tag 22	July 22, 2006	297 $\mu g/m^3$	30.7 $\mu g/m^3$	

JULY 18, 2006

HANDHELD SOUND LEVEL METER NOISE MONITORING RESULTS

LOCATION	ACTIVITY	SOUND LEVEL AT PROPERTY LINE OR 50 FEET	MONITORING PLAN LIMIT
North side of school	Loading dirt into trucks/ Hauling dirt	70-90 dB	80 dB (Levy) 85 dB (Railyard)
E Cascade Rd, near screening	Screening/Hauling dirt	75 dB	

8-HOUR COMMUNITY NOISE MONITORING - RAILYARD

DATE OF MONITORING	AVERAGE NOISE LEVEL	MAXIMUM NOISE LEVEL	MONITORING PLAN LIMIT
July 18, 2006	81.4 dB	113.4 dB	85 dB
July 19, 2006	79.2 dB	114.5 dB	
July 20, 2006	74.1 dB	112.2 dB	
July 21, 2006	74 dB	113.4 dB	
July 22, 2006	75.8 dB	112.4 dB	

8-HOUR COMMUNITY NOISE MONITORING - BRIDGE

DATE OF MONITORING	AVERAGE NOISE LEVEL	MAXIMUM NOISE LEVEL	MONITORING PLAN LIMIT
July 18, 2006	72.4 dB	101.5 dB	80 dB
July 19, 2006	69 dB	99.6 dB	
July 20, 2006	67 dB	96.4 dB	
July 21, 2006	67 dB	96.4 dB	
July 22, 2006	47.2 dB	81.9 dB	

CONCLUSIONS

Based on this data, the sandbag filling, dirt hauling, and screening conducted during the week of July 17 through July 22, 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.

The average noise levels documented during activities from July 18 to 22, 2006 were below the project action limit for community noise in the areas monitored. Maximum noise levels were recorded at both locations above the project action level. These exceedances were for extremely short durations and occurred during periods 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 allows 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 bridge 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,

Alex Peck
Industrial Hygienist

Reviewed by,

Elisabeth Black, CIH
Argus Pacific, Inc.

Attachments:

Air and Noise Monitoring Sample Locations Plan (07/18/06 and 07/20/06)

Laboratory Certificates of Analysis

DataChem Laboratories, Batch #06I-3690-01
DataChem Laboratories, Batch #06I-3690-02
DataChem Laboratories, Batch #06I-3690-03
DataChem Laboratories, Batch #06I-3690-04
DataChem Laboratories, Batch #06I-3883-02
DataChem Laboratories, Batch #06I-3883-03

DataRam4 data for instrument D-417 (07/17/06)
DataRam4 data for instrument D-417 (07/18/06)
DataRam4 data for instrument D-417 (07/19/06)
DataRam4 data for instrument D-417 (07/20/06)
DataRam4 data for instrument D-417 (07/21/06)
DataRam4 data for instrument D-417 (07/22/06)

DataRam4 data for instrument D-416 (07/18/06)
DataRam4 data for instrument D-416 (07/19/06)
DataRam4 data for instrument D-416 (07/20/06)
DataRam4 data for instrument D-416 (07/21/06)
DataRam4 data for instrument D-416 (07/22/06)

Larson Davis 820 Noise Data – Bridge (07/18/06 – 07/22/06)
Larson Davis 820 Noise Data – Railyard (07/18/06 – 07/22/06)