April 13, 2007 10077.009

Oregon Department of Environmental Quality Northwest Region 2020 SW Fourth Avenue Suite 400 Portland, Oregon 97201-4987

VIA Email

Attention:

Anna Coates

Subject:

Progress Report – February-March 2007

Remedial Investigation/Feasibility Study/Interim Removal Action Measures

Astoria Area-Wide Petroleum Site

Astoria, Oregon

DEQ ECSI File #2277

Dear Ms. Coates:

This letter presents the progress made by the PRP Group during February-March 2007 on the RI/FS and IRAM development at the Astoria Area-Wide Petroleum Site in Astoria, Oregon. This work is being conducted in response to DEQ Order No. ECSR-NWR-01-11.

WORK COMPLETED IN FEBRUARY-MARCH 2007

The Draft RI Report was delivered to the PRP Group for review on February 15, 2007. Documentation regarding the undocumented pipelines and structures found during the Bornstein Seafoods development was incorporated into the RI Report. A meeting was held on March 21, 2007, to discuss comments from the parties. Written comments will be addressed during April and May, and a final draft RI Report will be issued for review prior to submittal of a Draft RI to DEQ. An updated project schedule is attached to this progress report.

Development activity was conducted under the approved Contaminated Media Management Plan (CMMP) at the former Mobil/Niemi bulk plant by Riverlands, LLC. Cowlitz Clean Sweep (CCS) conducted work in areas where petroleum hydrocarbons were observed in soil. A soil stockpile of approximately 200 yards was generated for disposal. Verbal approval for storage longer than 30 days was provided by DEQ in our meeting on February 15, 2007, to allow for necessary work authorizations to be approved.

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Approval with comment of the proposed design specification for the IRAM at the former Mobil/Niemi bulk plant was received by DEQ on February 20, 2007. A response to these comments was prepared for review by the PRP Group.

CCS of Astoria, Oregon, performed monthly maintenance on the enhanced synthetic and floating absorbent boom system installed in Slip 2. Absorbent socks in monitoring wells containing free product were replaced monthly by CCS.

Meetings of the PRP Group representatives were held on February 1 and March 21, 2007. A meeting with DEQ was held on February 15, 2007. During that meeting DEQ provided approval for quarterly meetings with DEQ and less frequent project progress reports. The next DEQ meeting is scheduled for May 17, 2007.

WORK PLANNED FOR APRIL AND MAY 2007

Active project work tasks include the following:

- ➤ A technical memorandum describing two rounds of sub-slab sampling at the Port office building will be completed after evaluation of the second round of sub-slab sampling, which was completed the week of September 18, 2006;
- > Continued maintenance of the absorbent boom system in Slip 2;
- ➤ Implementation of IRAM design and CMMP for the redevelopment at the former Mobil/Niemi bulk plant property and construction of the IRAM;
- ➤ Documentation of reconstruction of four wells at the Riverlands development property and abandonment of three wells at the former Mobil/Niemi bulk plant will be submitted to DEQ;
- Abandonment of one additional monitoring well located in areas being redeveloped;
- > Preparation of the Draft RI report incorporating comments from the PRP Group; and
- > Incorporation of the draft human health risk assessment report into the RI and preparation for submittal to DEQ.

PROBLEMS ENCOUNTERED AND RESOLUTIONS

There were no problems requiring resolution during the reporting period.

Ms. Anna Coates April 13, 2007 Page 3

CLOSING COMMENTS

Please call me at (503)768-5121 if you have any questions or comments regarding this progress report.

Sincerely,

EnviroLogic Resources, Inc.

Thomas I. Calabrese, RG, CWRE Principal/Hydrogeologist

Project Manager

Distribution list attached cc:

Ms. Anna Coates April 13, 2007 Page 4



ASTORIA AREA-WIDE PETROLEUM SITE Distribution List

- 1 Anna Coates, DEQ Project Manager, Site Response
- 1 Peter Gearin, Port of Astoria
- 1 Tom Calabrese, EnviroLogic Resources, Inc., Consultant for AAW PRP Group
- 1 Max Miller, Tonkon Torp, Attorney for McCall Oil and Chemical Corporation
- 1 Ted McCall, McCall Oil and Chemical Corporation
- 1 John Edwards, Anchor Environmental, LLC, Consultant for McCall Oil and Chemical Corp
- 1 Cary E. Bechtolt, Niemi Oil Company
- 1 Jeff B. Kray, Marten Law Group, PLLC, Attorney for Niemi Oil Company
- 1 Kurt Harrington, AMEC, Inc., Consultant for Niemi Oil Company
- 1 Ed Platt, Shell Oil Company
- 1 Rick Glick, Davis Wright Tremaine, Attorney for Shell Oil Company
- 1 Leon Lahiere, Hart Crowser, Consultant for Shell Oil Company
- 1 Brian Harris, Harris Enterprises
- 1 Larry Vandermay, Flying Dutchman
- 1 David Bartz & Laura Maffei, Schwabe Williamson & Wyatt, Attorney for Flying Dutchman
- 1 Hong Huynh, Miller Nash, Attorney for Harris Enterprises
- 1 Lon Yandell, Kleinfelder, Consultant for Harris Enterprises
- 1 Richard Delphia, Delphia Oil Company
- 1 Chuck Smith, Attorney for Delphia Oil Company
- 1 Alistaire Clary, Maul Foster Alongi, Consultant for Delphia Oil Company
- 1 Darin Rouse, Chevron Environmental Management Company
- 1 Soniya Ziegler, Attorney for Chevron Environmental Management Company
- 1 Grant Sprick, ARCADIS US, Inc., Consultant for Chevron Environ. Management Co.
- 1 Gerry Koschal, ARCADIS US, Inc., Consultant for Chevron Environ. Management Co.
- 1 Brian Jacobson, Qwest Communications International, Inc.
- 1 David Bledsoe, Perkins Coie LLP, Attorney for Qwest Communications International, Inc.
- 1 Anita W. Lovely, Lovely Consulting, Inc., Consultant for ExxonMobil Corporation
- 1 Information Repository

UPDATED SCHEDULE (4/5/07)

Remedial Investigation/Feasibility Study Astoria Area-Wide Petroleum Site Astoria, Oregon

ID 1	Task Description ASTORIA AREA-WIDE PETROLEUM STUDY	Duration 1561 days	Start 1/9/2002	Finish 3/12/2008	Predecessors
3	RI/FS and IRAM PROPOSAL	11 days	1/9/2002	1/21/2002	
4 17					
18 19	RI/FS and IRAM DEVELOPMENT WORK PLAN	124 days	1/9/2002	7/1/2002	
58					
59 60	PHASE 1/2 RI/FS and IRAM WORK PLAN IMPLEMENTATION	1530 days	1/9/2002	1/29/2008	
61 124	SOURCE/SOIL CHARACTERIZATION	709 days	1/9/2002	11/1/2004	
125	GROUND-WATER CHARACTERIZATION	1221 days	8/12/2002	6/21/2007	
126 157	Water-Level Measurement Program Beneficial Ground Water and Land Use Studies	524 days 126 days	8/12/2002 8/27/2002	9/14/2004 2/21/2003	
164 185	Monitoring-Well Installation Program Quarterly Ground-Water Monitoring Program	365 days 281 days	8/20/2002 10/8/2003	2/5/2004 11/23/2004	
230	Hydraulic Characterization Program (NOT CURRENTLY PLANNED)	46 days	3/1/2004	5/4/2004	
238 239	Monitoring Well Maintenance Abandon MW-46, 47, and 48/Maintenance MW 17, 18, and 29	381 days 115 days	12/19/2005 12/19/2005	6/21/2007 6/2/2006	
252	Abandon MW 35, 39, and 45	164 days	10/30/2006	6/21/2007	
253 254	Draft Work Plan PRP Group Review	4 days 3 days	10/30/2006 11/3/2006	11/2/2006 11/7/2006	
255 256	Final Work Plan Mobilization/Demobilization	2 days 1 day	11/8/2006	11/9/2006	254 255FS+15 days
257	Well Abandonment MW-35,39	2 days	12/5/2006 12/6/2006	12/7/2006	256
258 259	IDW Management Well Abandonment MW-45	20 days 2 days	12/8/2006 6/1/2007	1/9/2007 6/4/2007	257 258,611SS
260	Draft Reconstruction/Abandonment Documentation	5 days	6/5/2007	6/11/2007	259
261 262	PRP Group Review Final Reconstruction/Abandonment Documention	5 days 2 days	6/12/2007 6/19/2007	6/18/2007 6/20/2007	
263 264	Submittal to DEQ	1 day	6/21/2007	6/21/2007 1/11/2007	
265	Project Management Reconstruct MW-30, 31, and 40	49 days 34 days	10/30/2006 4/9/2007	5/24/2007	
266 267	Letter to DEQ Mobilization/Demobilization	5 days 1 day	4/9/2007 4/30/2007	4/13/2007 4/30/2007	266FS+10 days
268	Well Reconstruction	1 day	5/1/2007	5/1/2007	267
269 270	Wellhead Re-Survey/Update Documentation Submittal to DEQ	2 days 5 days	5/16/2007 5/18/2007	5/17/2007	268FS+10 days 269
271 272	STORM/SURFACE WATER CHARACTERIZATION	586 days	8/19/2002	12/20/2004	
322					
323 335	SEDIMENT CHARACTERIZATION	100 days	6/13/2003	11/4/2003	
336 337	IRAM DEVELOPMENT Indoor Air Quality IRAM Development	1419 days 1097 days	5/13/2002 12/27/2002	12/28/2007 5/15/2007	
338	Comparison of Soil Data to Screening Levels	10 days	12/27/2002	1/10/2003	81
339 340	Indoor Air IRAM Development Air Quality Sampling Work Plan	1011 days 299 days	4/30/2003 4/30/2003	5/15/2007 7/15/2004	
347	Vapor Intrusion Pathway Sampling Sub-Slab Sampling	180 days	8/20/2004	5/9/2005	
367 368	Draft Sub-Slab Sampling Work Plan Preparation	523 days 32 days	4/18/2005 4/18/2005	5/15/2007 6/1/2005	
369 370	PRP Group Review Final Sub-Slab Sampling Work Plan	5 days 10 days	6/2/2005 6/9/2005	6/8/2005 6/22/2005	
371	Submittal to DEQ	1 day	6/23/2005	6/23/2005	370
372 373	Sub-Slab Probe Installation Soil Vapor Sampling	3 days 2 days	8/9/2005 8/12/2005	8/11/2005 8/15/2005	371FS+30 days 372
374 375	Laboratory Analyses Data Validation	10 days 10 days	8/16/2005 8/30/2005	8/29/2005 9/13/2005	373
376	Anaytical Data Compilation	5 days	9/14/2005	9/20/2005	375
377 378	Draft Sub-Slab Sampling TM PRP Group Review	40 days 5 days	10/19/2005 12/16/2005	12/15/2005 12/22/2005	376FS+20 days 377
379	Final Sub-Slab Sampling TM	5 days	12/27/2005	1/3/2006	378
380 381	Submittal to DEQ Round 2 Sub Slab Sampling	1 day 355 days	1/4/2006 12/16/2005	1/4/2006 5/15/2007	
382 383	Authorization to Proceed Mitigation System Eval, Telecons, Pressure Monitoring	50 days 100 days	12/16/2005 3/2/2006	3/1/2006 7/24/2006	
384	Confirmation from DEQ re Spatial/Temporal Distribution	1 day	5/10/2006	5/10/2006	
385 386	Mobilization Sub-Slab Probe Installation	15 days 1 day	8/21/2006 9/18/2006	9/11/2006 9/18/2006	382,384 385FS+4 days
387 388	Soil Vapor Sampling Laboratory Analyses	1 day 10 days	9/18/2006 9/19/2006	9/18/2006 10/2/2006	386SS
389	Data Validation	5 days	10/3/2006	10/9/2006	388
390 391	Anaytical Data Compilation Draft R1 and R2 Sub-Slab Sampling Data TM	5 days 130 days	10/10/2006 10/17/2006	10/16/2006 4/23/2007	
392	PRP Group Review	10 days	4/24/2007	5/7/2007	391
393 394	Final R1 and R2 Sub-Slab Sampling Data TM Submittal to DEQ	5 days 1 day	5/8/2007 5/15/2007	5/14/2007 5/15/2007	
395 403	HVAC Adjustments - IRAM	160 days	2/28/2005	10/13/2005	
404	HYDROCARBON SEEP IRAM DEVELOPMENT Bail-Down Testing	1145 days 3 days	6/12/2003 6/12/2003	12/28/2007 6/16/2003	139
405	Water Quality Sampling at Seep MWs	2 days	6/17/2003	6/18/2003	
406	Product Removal	125 dave			
406 414 421	Product Removal 2004 A Product Removal 2004 B Product Removal	125 days 107 days 106 days	6/16/2003 1/12/2004 7/19/2004	12/15/2003 6/10/2004 12/16/2004	

UPDATED SCHEDULE (4/5/07)

Remedial Investigation/Feasibility Study Astoria Area-Wide Petroleum Site Astoria, Oregon

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ID	Task Description	Duration	Start	Finish	Predecessors
428	2005 Product Removal	192 days	3/30/2005	1/4/2006	
439	2006 Product Removal	234 days	1/30/2006	1/4/2007	
452	2007 Product Removal	240 days	1/29/2007	12/28/2007	
465					
	Hydrocarbon Seep IRAM Work Plan	67 days	6/17/2003	9/22/2003	
471	Hydrocarbon Seep IRAM Implementation	1031 days	11/24/2003	12/28/2007	
472	IRAM Design/Build	206 days	11/24/2003	9/24/2004	
481	O&M 2005 Month	192 days	3/10/2005	12/12/2005	
492	O&M Boom 2006	230 days	1/30/2006	12/28/2006	
505	O&M Boom 2007	240 days	1/29/2007	12/28/2007	
518					
	Upland Data Collection	401 days	1/23/2004	8/25/2005	
535	Additional Product Characterization	229 days	2/24/2005	1/23/2006	
557	Baildown Testing/Water Level Monitoring	15 days	5/15/2006	6/5/2006	
565	TANK-BOTTOM WASTE IRAM DEVELOPMENT (McCALL BP)	915 days	5/13/2002	1/9/2006	
566	Technology Screening	10 days	5/13/2002	5/24/2002	44
567	Detailed Evaluation of Alternatives	10 days	5/28/2002	6/10/2002	
		5 days			
568	Implementation Plan Proposal		6/11/2002	6/17/2002	
569	Review IRAM Implementation Report	5 days	1/3/2006		167FS+665 days
570	FORMER MOBIL/NIEMI BULK PLANT IRAM	754 days	9/7/2004	8/31/2007	
571	IRAM Work Plan	120 days	9/7/2004	3/1/2005	
578	UST Removal	48 days	9/20/2004	11/24/2004	
596	IRAM Implementation	634 days	3/2/2005	8/31/2007	
597	Vapor Barrier/Extraction Design	536 days	3/2/2005	4/17/2007	
598	Acquire Building Plans (dependent on Developer)	350 days	3/2/2005	7/21/2006	
599	Conceptual Design	30 days	7/24/2006	9/1/2006	
600	PRP Group Review	10 days	9/5/2006	9/18/2006	599
601	Draft Vapor Barrier/Extraction Design	30 days	9/19/2006	10/30/2006	
602	PRP Group Review	15 days	10/31/2006	11/20/2006	
603					
	Final Vapor Barrier/Extraction Design	30 days	11/21/2006	1/8/2007	
604	Submittal to DEQ	1 day	1/9/2007	1/9/2007	
605	DEQ Approval	30 days	1/10/2007	2/20/2007	
606	Response to Comments	40 days	2/21/2007	4/17/2007	605
607	Project Management	39 days	9/19/2006	11/10/2006	
608	Vapor Barrier/Extraction Construction	42 days	4/18/2007	6/14/2007	
609	Contracting	30 days	4/18/2007	5/29/2007	606
610	Mobilization/Demobilization	2 days	5/30/2007		605FS+40 days,609
611	Drilling/SVE Well Installation	5 days	6/1/2007	6/7/2007	
612	Vapor Barrier Construction Oversight	10 days	6/1/2007	6/14/2007	610
613	Contaminated Media Management Plan	123 days	6/29/2006	12/27/2006	
623	Site Preparation Support	194 days	8/8/2006	5/14/2007	
624	Soil Stockpile Removal	3 days	9/6/2006		617FS+20 days
625	Subsurface Structure Removal	3 days	8/8/2006	8/10/2006	
626	Prepare documentation	20 days	11/16/2006	12/15/2006	
627	PRP Group Review	5 days	12/18/2006	12/26/2006	
628	Submittal to DEQ	1 day	12/27/2006	12/27/2006	627
629	Excavation Oversight	10 days	1/15/2007	1/26/2007	
630	Soil Stockpile Removal 2	10 days	4/2/2007		629FS+45 days
631	Prepare Documentation 2	15 days	4/16/2007	5/4/2007	
632	PRP Group Review	5 days	5/7/2007	5/11/2007	
633	Submittal to DEQ	1 day	5/14/2007	5/14/2007	032
634	IRAM Implementation Technical Memorandum	56 days	6/15/2007	8/31/2007	
635	Draft IRAM Implementation TM Preparation	40 days	6/15/2007	8/9/2007	612
636	PRP Group Review	10 days	8/10/2007	8/23/2007	635
637	Final IRAM Implementation TM	5 days	8/24/2007	8/30/2007	
638	Submittal to DEQ	1 day	8/31/2007	8/31/2007	
639	COMMUNITY RELATIONS ACTIVITIES	1196 days	4/30/2003	1/29/2008	10/
640					
641	PROJECT MANAGEMENT	1381 days	7/10/2002	12/31/2007	
642	Phase 1 PM	257 days	7/10/2002	7/15/2003	
663	Phase 2 PM	164 days	4/30/2003	12/30/2003	
686	2004 A PM	242 days	1/5/2004	12/16/2004	
731	2005 PM	597 days	8/8/2003	12/31/2005	
774	2006 PM	250 days	1/3/2006	12/29/2006	
816	2007 PM	260 days	1/2/2007	12/31/2007	
817					
818	REMEDIAL INVESTIGATION REPORT PREPARATION	739 days	11/10/2004	10/15/2007	
819	RI Report Outline	300 days	11/10/2004		688FS+208 days
820	RI Data Elements Compilation	90 days	2/24/2005		819SS+70 days,204
					820,120,296,331,204,531SS,353
821	Data Interpretation	75 days	7/5/2005		
822	Draft RI Report	150 days	10/19/2005	5/24/2006	
823	PRP Group Review	41 days	5/25/2006	7/25/2006	
828	Final Internal Draft RI Report	140 days	7/26/2006	2/14/2007	
829	PRP Group Review	30 days	2/15/2007	3/28/2007	
830	Draft Final Draft RI Report	40 days	3/29/2007	5/23/2007	
831	Final PRP Group Review	15 days	5/24/2007	6/13/2007	
832	Final Draft RI Report	15 days	6/14/2007	7/4/2007	
833	DEQ Review	30 edays	7/4/2007	8/3/2007	
834	Final RI Report	30 days	8/6/2007	9/14/2007	833
835	DEQ Approval	1 day	10/15/2007		834FS+30 edays
836					,
837	RISK ASSESSMENT	748 days	3/1/2004	2/20/2007	
838	HUMAN HEALTH RISK ASSESSMENT	440 days	5/19/2005	2/20/2007	04 400 004 005
839	Human Health Risk Assessment Work Plan	194 days	5/19/2005		81,193,331,285
840	Scoping/Data Management	20 days	5/19/2005		820FS-30 days
841	Draft HHRA Work Plan	29 days	6/17/2005	7/29/2005	
	PRP Group Review	10 days	8/1/2005	8/12/2005	
842 4/5/2007	·	10 dayo			J. 1

UPDATED SCHEDULE (4/5/07)

Remedial Investigation/Feasibility Study Astoria Area-Wide Petroleum Site Astoria, Oregon

ID	Task Description	Duration	Start	Finish	Predecessors
843	Meeting with DEQ	2 days	7/8/2005		841SS+13 days
844	Final Draft HHRA Work Plan	5 days	8/15/2005	8/19/2005	842
845	PRP Group Review	5 days	8/22/2005	8/26/2005	
846	Final HHRA Work Plan	29 days	8/29/2005	10/7/2005	845
847	Submittal to DEQ	1 day	10/10/2005	10/10/2005	846
848	Prep Response to Comments	55 days	12/8/2005	2/28/2006	847FS+40 days
849	Risk Assessment Report	246 days	3/1/2006	2/20/2007	
850	DEQ Approval of Work Plan	50 days	3/1/2006	5/9/2006	848
851	Draft HHRA Report	45 days	5/10/2006	7/14/2006	847FS+40 days,821,850
852	PRP Group Review	10 days	7/17/2006	7/28/2006	851
853	Final Draft HHRA Report	110 days	7/31/2006	1/8/2007	852
854	PRP Group Review	30 days	1/9/2007	2/19/2007	853
855	Submittal to DEQ (with Draft RI Report)	1 day	2/20/2007	2/20/2007	854
856	Project Management	66 days	5/10/2006	8/14/2006	840SS,850
857	ECOLOGICÁL EVALUATION	685 days	3/1/2004	11/16/2006	<u> </u>
892					
893	FEASIBILITY STUDY	190 days	6/21/2007	3/12/2008	
894	Feasibility Study Work Plan	77 days	6/21/2007	10/5/2007	
895	Establish Remedial Action Objectives	5 days	6/21/2007	6/27/2007	821,120,193,531,855,828FS+90
896	Identify General Response Actions	10 days	6/28/2007	7/11/2007	895
897	Determine Preliminary Remediation Goals	5 days	7/12/2007	7/18/2007	896
898	ID/Screen Remedial Technologies	10 days	7/19/2007	8/1/2007	897,887
899	Draft Feasibility Study Work Plan	10 days	8/2/2007	8/15/2007	898
900	PRP Group Review	10 days	8/16/2007	8/29/2007	899
901	Final Feasibility Study Work Plan	5 days	8/30/2007	9/5/2007	900
902	DEQ Review	30 edays	9/5/2007	10/5/2007	901
903	Feasibility Study Evaluation	40 days	10/8/2007	11/30/2007	
904	Assemble/Screen Remedial Alternatives	10 days	10/8/2007	10/19/2007	902
905	Detailed Analysis	15 days	10/22/2007	11/9/2007	904
906	Compare Remedial Alternatives	10 days	11/12/2007	11/23/2007	905
907	Recommend Preferred Alternative	5 days	11/26/2007	11/30/2007	906
908	Reporting	73 days	12/3/2007	3/12/2008	
909	Draft FS Report	15 days	12/3/2007	12/21/2007	907
910	PRP Group Review	10 days	12/24/2007	1/4/2008	909
911	Final Draft FS Report	10 days	1/7/2008	1/18/2008	910
912	Submittal to DEQ	1 day	1/21/2008	1/21/2008	
913	DEQ Review	30 edays	1/21/2008	2/20/2008	
914	Final FS Report	15 days	2/21/2008	3/12/2008	913
915	,	,			

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