BEFORE THE ENVIRONMENTAL APPEALS BOARD UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C.

In re:	_)	
Shell Gulf of Mexico, Inc. OCS Permit No. R10 OCS/PSD-AK-09-01)	
OCS Termit No. KTO OCS/TSD-AK-07-01)	OCS Appeal Nos. 11-02, 11-03 & 11-04
Shell Offshore, Inc. OCS Permit No. R10 OCS/PSD-AK-2010-01)	
Frontier Discoverer Drilling Unit))	

SUBMISSION OF REVISED CERTIFIED INDEX TO THE ADMINISTRATIVE RECORD

EPA Region 10 (Region 10) hereby notifies the Board that Region 10 is submitting a revised Certified Index to the Administrative Record, which was originally dated November 4, 2011 and filed with the Board on November 7, 2011.

Region 10 has discovered clerical errors in certain entries toward the end of Categories CCC and DDD (documents identified with the wrong date in the index). A Revised Certified Index to the Administrative Record is attached. Note that the errors are limited to the index and not to the documents identified in the index that were contained on four copies of two DVDs filed with the Board and the copies of two DVDs sent to all parties on November 7 and 8, 2011.

Dated: November 16, 2011

Respectfully submitted,

Julie A. Vergeront Office of Regional Counsel U.S. EPA, Region 10 1200 Sixth Avenue, Suite 900 Seattle, Washington 98101 Telephone: (206) 553-1497 FAX: (206) 553-1762 Vergeront.Julie@epa.gov

Alexander Fidis
Assistant Regional Counsel
U.S. EPA, Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101
Telephone: (206) 553-4710
FAX: (206) 553-1762
Fidis.Alexander@epa.gov

David Coursen
Office of General Counsel
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW (2322A)
Washington, DC 20460
Telephone: (202) 564-0781
FAX: (202) 501-0644

CERTIFICATE OF SERVICE AND CERTIFICATE FOR REVISED CERTIFIED INDEX IN PAPER FORMAT

I hereby certify that the attached Submission of Revised Certified Index to the Administrative Record in re: Shell Gulf of Mexico, Inc. and Offshore, Inc., OCS Permit Nos. R10OCS/PSD-AK-09-01 and R10OCS/PSD-AK-2010-01, OCS Appeal Nos. 11-02, 11-03 & 11-04, was filed with the Clerk of the Environmental Appeals Board electronically through CDX.

Pursuant to the Environmental Appeals Board Order Authorizing Electronic Filing in Proceedings before the Environmental Appeals Board not Governed by 40 C.F.R. Part 22, dated January 28, 2010, I further certify that I cause to be delivered to the Board at the hand delivery address below a paper copy of the above-described document that is an identical copy of the document filed through CDX.

U.S. Environmental Protection Agency Clerk of the Board, Environmental Appeals Board Colorado Building 1341 G Street, N.W., Sixth Floor Washington, D.C. 20005

I also certify that an electronic copy of the Submission of Revised Certified Index of the Administrative Record of OCS Permit Nos. R10OCS/PSD-AK-09-01 and R10OCS/PSD-AK-2010-01, OCS Appeal Nos. 11-02, 11-03 & 11-04, was sent to each of the persons identified below via email:

Counsel

Tanya Sanerib Christopher Winter Crag Law Center 917 SW Oak Street, Suite 417 Portland, OR 97205

Colin O'Brien Eric Jorgensen Earthjustice 325 Fourth Street Juneau, AK 99801

David Hobstetter Eric Grafe Earthjustice 441 W 5th Avenue, Suite 301 Anchorage, AK 99501

Duane A. Siler Sarah C. Bordelon Tony G. Mendoza Crowell & Moring LLP 1001 Pennsylvania Ave. N.W. Washington, DC 20004

Daniel Lum P.O. Box 70169 Fairbanks, AK 99707

Dated: November 16, 2011

Service e-mail

tanya@crag.org chris@crag.org

<u>cobrien@earthjustice.org</u> <u>ejorgensen@earthjustice.org</u>

dhobstetter@earthjustice.org egrafe@earthjustice.com

dsiler@crowell.com sbordelon@crowell.com tmendoza@crowell.com

eskimo.whaler@yahoo.com

Julie A. Vergeront

Assistant Regional Counsel

U.S. EPA Region 10

1200 6th Avenue, Suite 900

Seattle, WA 98101

Telephone: (206) 553-1497

Fax: (206) 553- 1762 Vergeront.julie@epa.gov

BEFORE THE ENVIRONMENTAL APPEALS BOARD UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C.

In re:	_)	
Shell Gulf of Mexico, Inc. OCS Permit No. R10 OCS/PSD-AK-09-01)	
)	OCS Appeal Nos. OCS 11-02, 11-03 11-04
Shell Offshore, Inc. OCS Permit No. R10 OCS/PSD-AK-2010-01)	
Frontier Discoverer Drilling Unit)	

REVISED CERTIFIED INDEX TO THE ADMINISTRATIVE RECORD

As the Associate Director in the Office of Air, Waste and Toxics for the United States Environmental Protection Agency, Region 10, I hereby certify that the attached index constitutes the combined and consolidated revised Certified Index to the Administrative Record forming the basis for EPA' Region 10's decision to issue the above-captioned revised Outer Continental Shelf permits to Shell Gulf of Mexico, Inc. and Shell Offshore, Inc. This revises and replaces the Certified Index to the Administrative Record dated November 4, 2011, which contained clerical errors in the date column for some entries.

Dated: November 16, 2011

Janis Hastings, Associate Director Office of Air, Waste and Toxics Environmental Protection Agency, Region 10

Administrative Record Index

OCS PSD Permit R10OCS/PSD-AK-09-01 And OCS PSD Permit R10OCS/PSD-AK-2010-01¹

Table of Contents: Supplemental Documents in the Administrative Record²

AAA. Supplemental Application Materials

BBB. Supplemental Guidance, Background Information, and Technical Analysis

CCC. Supplemental Correspondence and Communication between EPA and Shell (including Shell contractors)

DDD. Supplemental Other Correspondence

EEE. Supplemental Endangered Species Act/Essential Fish Habitat

FFF. Supplemental Environmental Justice

GGG. Supplemental Government-to-Government Consultation

QQQ. 2011 Revised Draft Permits

RRR. Public Comments on 2011 Revised Draft Permits

SSS. Final 2011 Revised Permits

Table of Contents: Documents in the Administrative Record as of June 4, 2010³

A. Permit Application Documents and Supplemental Application Materials

AA. Permit Application Documents and Supplemental Application Materials (cont.)

B. Guidance, Background Information and Technical Analysis

BB. Guidance, Background Information and Technical Analysis (cont.)

C. Correspondence and Communication between EPA and Shell (including Shell contractors)

November 14, 2011 Page 1 of 197

_

¹ This permit is erroneously identified in OCS Appeal Nos. 10-01 through 10-04 as OCS PSD Permit R10OCS/PSD-AK-10-01. The permit number on the permit issued by Region 10 on April 9, 2010 for Shell's operations with the Discoverer in the Beaufort Sea and the revised permit covering the same operations issued by Region 10 on September 19, 2011 are both identified as R10OCS/PSD-AK-2010-01. The permit number is correct in the current appeal, OCS Appeal Nos. 11-02 & 11-03.

² The identified documents have been added to the Administrative Record since the Certified Index to the Administrative Record was filed by Region 10 on June 4, 2010 in OCS Appeal Nos. 10-01 through 10-04.

³ These documents are identified in the Certified Index to the Administrative Record filed by Region 10 on June 4, 2010 in OCS Appeal Nos. 10-01 through 10-04.

CC. Correspondence and Communication between EPA and Shell (including Shell contractors)

(cont.)

- D. Other Correspondence
- DD. Other Correspondence (cont.)
- E. Endangered Species Act/ Essential Fish Habitat
- EE. Endangered Species Act/ Essential Fish Habitat (cont.)
- F. Environmental Justice
- G. Government-to-Government Consultation
- GG. Government-to-Government Consultation (cont.)
- H. Initial Proposed Chukchi Permit (proposed August 20, 2009)
- I. Public Comments on August 2009 Initial Proposed Chukchi Permit
- J. Modified Proposed Chukchi Permit (proposed January 8, 2010)
- K. Public Comments on January 2010 Proposed Chukchi OCS/PSD Permit
- L. Final Chukchi Permit
- MM. ADEC Rules/Regulations
- NN. Proposed Beaufort Permit
- OO. Public Comments on Beaufort OCS/PSD Proposed Permit
- PP. Final Beaufort Permit

November 14, 2011 Page 2 of 197

Supplemental Documents in the Administrative Record⁴

Section AAA: Supplemental Application Materials

EPA Exhibit		
Number	Date	Document Description
AAA-1	12/1/2010	Evaluation of the COARE-AERMOD Alternative Modeling Approach Support for Simulation of Shell Exploratory Drilling Sources In the Beaufort and Chukchi Seas, Prepared by ENVIRON
AAA-2	6/10/2011	Shell Discoverer June 10 Submittal Compilation – Cover Letter from Susan Childs, Shell, to Doug Hardesty, EPA, RE: Discoverer Permits R10OCS/PSD-AK-2009-01, issued March 20, 2010 for the Discoverer Drillship to operate in the Chukchi Sea, Alaska and R10OCS/PSD-AK-2010-01, issued on April 7, 2010 for the Discoverer Drillship to operate in the Beaufort Sea, Alaska (Including Attachments)
AAA-3	6/22/2011	Shell Discoverer June 22 Submittal - Letter from Kirk Winges, ENVIRON, to Andy Hawkins, EPA, RE: Modeling Files
AAA-4	6/23/2011	Shell Discoverer June 23 Submittal – Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: GHG Calculation Information (Attachments: EPA drill mud gas volume, Methane calc20101022)
AAA-5	7/6/2011	Disco Air Quality Impact Modeling Files (Identifying Files on File at Region 10)

Return to Section AAA

Return to Table of Contents

November 14, 2011 Page 3 of 197

⁴ The identified documents have been added to the Administrative Record since the Certified Index to the Administrative Record was filed by Region 10 on June 4, 2010 in OCS Appeal Nos. 10-01 through 10-04.

Section BBB: Supplemental Guidance, Background Information, and Technical Analysis

EPA	5. Supplement	an Guidance, Dackground Imormation, and Technical Analysis
Exhibit		
Number	Date	Document Description
BBB-1	12/19/1980	Letter from Douglas Costle, EPA, to Jennings Randolph, Committee on Environment and Public Works, RE: Ambient Air Definition
BBB-2	6/13/1989	Memorandum from Terrel Hunt, EPA, to John Seitz, EPA, RE: Guidance on Limiting Potential to Emit in New Source Permitting, transmitting "Limited Potential to Emit in New Source Permitting," dated June 13, 1989
BBB-3	1/25/1995	Memorandum from John Seitz, EPA, to Director, Air, Pesticides and Toxics Management Division, Regions I and IV, RE: Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)
BBB-4	11/14/1995	Memorandum from John Seitz, EPA, to Director, Office of Ecosystem Protection, Region I, RE: Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities
BBB-5	3/1/1997	Prudhoe Bay Air Quality Monitoring Program Quality Assurance Plan, Prepared by ENSR
BBB-6	3/19/1997	Letter from Vincent Scheetz, ENSR, to Richard Heffern, ADEC, RE: Quality Assurance Manual – Prudhoe Bay Monitoring Program
BBB-7	9/24/1997	Memorandum from Richard Heffern, ADEC, to Jim Baumgartner, ADEC, RE: BP Prudhoe Bay Ambient Air QA Monitoring Plan Review
BBB-8	1/1/1999	Black's Law Dictionary, Seventh Edition (Various Terms: constitutum debiti-construction, erase-error)
BBB-9	11/1/1999	The Plume Volume Molar Ratio Method for Determining NO2/NoX Ratios in Modeling - Part 1: Methodology, Prepared by Patrick Hanrahan, EPA, Journal of the Air & Waste Management Association
BBB-10	11/1/1999	The Plume Volume Molar Ratio Method for Determining NO2/NoX Ratios in Modeling - Part 2: Evaluation Studies, Prepared by Patrick Hanrahan, EPA, Journal of the Air & Waste Management Association
BBB-11	2/1/2000	Meteorological Monitoring Guidance for Regulatory Modeling Applications, Prepared by EPA
BBB-12	9/2/2003	The TOGA-COARE Bulk Air-Sea Flux Algorithm, Prepared by C.W. Fairall, NOAA, and E.F. Bradley, CSIRO Land and Water

November 14, 2011 Page 4 of 197

EPA Exhibit	5	
Number	Date	Document Description
BBB-13	2/10/2004	ADEC Modeling Review Procedures Manual
BBB-14	8/25/2004	Standard Operating Permit Condition VI - Good Air Pollution Control Practices; Permit Condition for Air Quality Permits, Adopted by Reference in 18 AAC 50.346, Prepared by Department of Environmental Conservation
BBB-15	9/1/2004	Sensitivity Analysis of PVMRM and OLM in AERMOD, Alaska Contract No. 18-8018-04, Prepared by MACTEC
BBB-16	6/1/2005	Evaluation of Bias in AERMOD-PVMRM, Alaska DEC Contract No. 18-9010-12, Prepared by MACTEC
BBB-17	11/9/2005	Federal Register [70 FR 68218-68261], Revision to the Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions, Final Rule
BBB-18	4/26/2007	Letter from Alan Schuler, ADEC, to Alison Cooke, BPXA, RE: Tentative Approval of Modeling Protocol Submitted by BP Exploration (Alaska), Inc.
BBB-19	5/24/2007	Letter from Walter Gray, MACTEC, to Alan Schuler, ADEC, RE: QAPP Review Support for BP Exploration Alaska (BPXA) Ambient Air Monitoring Program – Liberty Project (Attachment: QAPP review)
BBB-20	6/1/2007	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Quarterly Data Report – January through March 2007, Prepared by RETEC
BBB-21	6/22/2007	Memorandum from Stephen Page, EPA, to Regional Air Division Directors, EPA, RE: Interpretation of "Ambient Air" in Situations Involving Leased Land Under the Regulations for Prevention of Significant Deterioration (PSD)
BBB-22	6/23/2007	Particulate Sampler Field Envelope, Prepared by IML Air Science
BBB-23	7/13/2007	RETEC Horizontal Wind Direction Calibration/Audit Form
BBB-24	7/25/2007	Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist, Prepared by ADEC

November 14, 2011 Page 5 of 197

EPA Exhibit Number	Date	Document Description
BBB-25	10/9/2007	Letter from Steven Riva, EPA, to Leon Sedefian, DEC, RE: Ambient Air for the Offshore LNG Broadwater Project
BBB-26	11/1/2007	Quality Assurance Project Plan for the Liberty Project Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BBB-27	11/1/2007	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Quarterly Data Report – April through June 2007
BBB-28	11/1/2007	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Quarterly Data Report – July through September 2007
BBB-29	11/5/2007	Letter from Al Trbovich, Hoefler, to Alan Schuler, ADEC, RE: BP Exploration (Alaska) Inc. Liberty Development Project Ambient Air Monitoring Program Quality Assurance Project Plan
BBB-30	2/1/2008	First Annual Data Report – Liberty Development Project Ambient Air Monitoring Program – Prudhoe Bay, Alaska, Prepared by Hoefler
BBB-31	2/1/2008	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Final Data Report – January through December 2007
BBB-32	2/13/2008	Department Review of BPXA's 2006 A-Pad/CCP Ambient Pollutant/Meteorological Data
BBB-33	3/1/2008	Quality Assurance Handbook for Air Pollution Measurement Systems; Volume IV: Meteorological Measurements, Version 2.0, Prepared by EPA
BBB-34	12/1/2008	Appendix D – Method Specific Validation Tables and Audit Forms, Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.4, Prepared by SLR
BBB-35	1/5/2009	Meteorological and Pollutant Data Review - BPXA 2007 Prudhoe Bay Unit Data, Prepared by Enviroplan Consulting
BBB-36	1/5/2009	Email from Alan Schuler, ADEC, to Alison Cooke, BPXA, RE: Findings re 2007 Prudhoe Bay Met/Pollutant Data
BBB-37	10/13/2009	Technical Analysis Report: Air Quality Control Minor Permit AQ0166CPT04 and Air Quality Control Construction Permit AQ0270CPT04, Prepared by Alaska Department of Environmental Conservation - Air Permits Program

November 14, 2011 Page 6 of 197

EPA Exhibit Number	Date	Document Description
BBB-38	11/1/2009	2008 Annual Data Report – Prudhoe Bay Unit, Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BBB-39	1/27/2010	Letter from John Kuterbach, ADEC, to James Pfeiffer, BPXA, RE: Construction Permit AQ0170CPT01 revised Technical Analysis Report (TAR) and Response to Comments (RTC) for BP Exploration (Alaska) Inc. (BPXA) for the Seawater Injection Plan East (SIPE) Main Injection Pump Bundle Replacement Project
BBB-40	2/1/2010	Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BBB-41	2/9/2010	Federal Register [75 FR 6474-6537], Primary National Ambient Air Quality Standards for Nitrogen Dioxide, Final Rule
BBB-42	2/26/2010	Memo from Tyler Fox, EPA, to Erik Snyder, EPA, RE: Model Clearinghouse Review of Modeling Procedures for Demonstrating Compliance with PM2.5 NAAQS
BBB-43	3/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – October 1 through December 31, 2009, Prepared by AECOM
BBB-44	3/1/2010	Wainwright Near-Term Ambient Air Quality Monitoring Program Annual Data Report – November 2008 through November 2009, Version 2, Prepared by AECOM
BBB-45	3/1/2010	Wainwright Near-Term Ambient Air Quality Monitoring Program Annual Data Report – November 2008 through November 2009, Prepared by AECOM
BBB-46	3/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program Fourth Quarter Data Report – September through December 2009, Prepared by AECOM
BBB-47	4/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – January 1 through March 31, 2010, Prepared by AECOM
BBB-48	4/7/2010	Letter from Al Trbovich, Hoefler, to Alan Schuler, ADEC, RE: BP Exploration (Alaska) – Revised Prudhoe Bay Unit 2008 Annual Data Report for the Ambient Air and Meteorological Monitoring Program
BBB-49	4/12/2010	Federal Register, Final Rule - Safety Zone; FRONTIER DISCOVERER, Outer Continental Shelf Drillship, Chukchi and Beaufort Seam Alaska, 75 FR 18404-18407

November 14, 2011 Page 7 of 197

EPA Exhibit		
Number	Date	Document Description
BBB-50	5/1/2010	Cover Page – Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM
BBB-51	5/1/2010	Signature Page - Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM
BBB-52	5/1/2010	Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM, Revision 1
BBB-53	5/1/2010	Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.1, Prepared by Hoefler
BBB-54	5/25/2010	Letter from Tom Damiana, AECOM, to Herman Wong, EPA, RE: Quality Assurance Project Plan for the Wainwright Ambient Air Quality and Meteorological Monitoring Site – Permanent Station
BBB-55	6/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program First Quarter Data Report – January through March 2010, Prepared by AECOM
BBB-56	6/28/2010	Memorandum from Tyler Fox, EPA, to Regional Air Division Directors, EPA, RE: Applicability of Appendix W Modeling Guidance for the 1-hour NO2 National Ambient Air Quality Standard
BBB-57	8/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – April 1 through June 30, 2010, Prepared by AECOM
BBB-58	8/17/2010	Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM
BBB-59	8/23/2010	Memorandum from Stephen Page, EPA, to Regional Air Division Directors, EPA, RE: Guidance Concerning the Implementation of the 1-hour SO2 NAAQS for the Prevention of Significant Deterioration Program
BBB-60	9/1/2010	2009 Annual Data Report – Prudhoe Bay Unit, Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BBB-61	9/1/2010	July 2010 Monthly Data Deliverable – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BBB-62	9/1/2010	August 2010 Monthly Data Deliverable – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler

November 14, 2011 Page 8 of 197

EPA Exhibit		
Number	Date	Document Description
BBB-63	9/27/2010	Standard Permit Condition III - Excess Emissions and Permit Deviation Reports; Permit Condition for Air Quality Permits, Adopted by Reference in 18 AAC 50.346, Prepared by Department of Environmental Conservation
BBB-64	9/27/2010	Standard Permit Condition XV - Emission Inventory Reporting; Permit Condition for Air Quality Permits, Adopted by Reference in 18 AAC 50.346, Prepared by Department of Environmental Conservation
BBB-65	9/27/2010	Standard Permit Condition XVI - Emission Inventory Reporting Form; Permit Condition for Air Quality Permits, Adopted by Reference in 18 AAC 50.346, Prepared by Department of Environmental Conservation
BBB-66	10/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – July 1 through September 30, 2010, Prepared by AECOM
BBB-67	11/1/2010	Deadhorse PM2.5 Monitoring Program Data Report 4th Quarter 2009, Prepared by AECOM
BBB-68	11/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program Second Quarter Data Report – April through June 2010, Prepared by AECOM
BBB-69	11/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program Third Quarter Data Report – July through September 2010, Prepared by AECOM
BBB-70	11/1/2010	Quarter A Data Summary – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by SLR
BBB-71	12/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Annual Data Summary Report – August 15, 2009 through September 30, 2010, Prepared by AECOM
BBB-72	12/1/2010	Deadhorse PM2.5 Monitoring Program Data Report 2nd Quarter 2010, Prepared by AECOM
BBB-73	12/21/2010	Email from Alan Schuler, ADEC, to Alison Cooke, BPXA, RE: Revised Findings Report for 2008 and 2009 Prudhoe Data
BBB-74	12/21/2010	Final Findings Report (Revised) - Pollutant and Meteorological Data Review and Annual Report Review for the BP Exploration Alaska Prudhoe Bay Unit Data for the Period January 1, 2008 through December 31, 2008, Prepared by Enviroplan Consulting

November 14, 2011 Page 9 of 197

EPA Exhibit Number	Date	Document Description
BBB-75	12/21/2010	Final Findings Report (Revised) - Pollutant and Meteorological Data Review and Annual Report Review for the BP Exploration Alaska Prudhoe Bay Unit Data for the Period January 1, 2009 through December 31, 2009, Prepared by Enviroplan Consulting
BBB-76	1/1/2011	Deadhorse PM2.5 Monitoring Program Data Report 1st Quarter 2010, Prepared by AECOM
BBB-77	1/1/2011	Quarter B Data Summary (September – November 2010) – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by SLR
BBB-78	2/1/2011	Deadhorse PM2.5 Monitoring Program Data Report 3rd Quarter 2010, Prepared by AECOM
BBB-79	2/22/2011	Letter from Al Trbovich, SLR, to Alan Schuler, ADEC, RE: BP Exploration (Alaska) – Prudhoe Bay Unit, Ambient Air and Meteorological Monitoring Program Quality Assurance Project Plan (Attachment: Quality Assurance Project Plan)
BBB-80	3/1/2011	Memorandum from Tyler Fox, EPA, to Regional Air Division Directors, EPA, RE: Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO2 National Ambient Air Quality Standard
BBB-81	3/1/2011	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – October 1 through December 30, 2010, Prepared by AECOM
BBB-82	3/1/2011	Deadhorse PM2.5 Monitoring Program Data Report 4th Quarter 2010, Prepared by AECOM
BBB-83	3/1/2011	Wainwright Permanent Ambient Air Quality Monitoring Program Fourth Quarter Data Report – October through December 2010, Prepared by AECOM
BBB-84	3/1/2011	Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.4, Prepared by SLR
BBB-85	3/1/2011	Appendix A – Program References, Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.4, Prepared by SLR
BBB-86	3/1/2011	Appendix B – Monitoring Program Supporting Documents, Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.4, Prepared by SLR

November 14, 2011 Page 10 of 197

EPA Exhibit	_	
Number	Date	Document Description
BBB-87	3/1/2011	Bureau of Ocean Energy Management, Alaska OCS Region - Detailed Active Leases
BBB-88	3/1/2011	PSD and Title V Permitting Guidance for Greenhouse Gases, Prepared by EPA
BBB-89	4/1/2011	Wainwright Permanent Ambient Air Quality Monitoring Program Annual Data Report – January through December 2010, Prepared by AECOM
BBB-90	4/1/2011	Quarter C Data Summary (December 31, 2010 – February 28, 2011) – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by SLR
BBB-91	4/1/2011	Memorandum from Herman Wong, EPA, to Tyler Fox, EPA, RE: COARE Bulk Flux Algorithm to Generate Hourly Meteorological Data for Use with the AERMOD Dispersion Program; Section 3.2.2.e Alternative Refined Model Demonstration
BBB-92	4/19/2011	Email from Kwame Agyei, ADEC, to Al Trbovich, SLR, RE: Approval of PBU QAPP Version 1.1
BBB-93	4/19/2011	Prudhoe Bay Unit QAPP Version 1.1 Approval Signatures
BBB-94	5/1/2011	Revised Outer Continental Shelf Lease Exploration Plan - Camden Bay, Beaufort Sea, Alaska - Flaxman Island Blocks 6559, 6610 & 6658, Beaufort Sea Lease Sales 195 & 202 (Including Attachments: Appendices A-M), Prepared by Shell
BBB-95	5/1/2011	Revised Outer Continental Shelf Lease Exploration Plan - Camden Bay, Beaufort Sea, Alaska - Burger Prospect: Posey Area Blocks 6714, 6762, 6764, 6812, 6912, & 6915, Chukchi Sea Lease Sale 193 (Including Attachments: Appendices A-M), Prepared by Shell
BBB-96	5/1/2011	Kaktovik Ambient Air and Meteorological Monitoring Program – Quality Assurance Project Plan, Prepared by SLR
BBB-97	5/1/2011	Appendix C – Standard Operating Procedures (SOPs), Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.4, Prepared by SLR
BBB-98	5/1/2011	Summary of Changes to the Quality Assurance Project Plan for the Shell Point Lay and Meteorological Monitoring Project, Version 1.4

November 14, 2011 Page 11 of 197

EPA Exhibit		
Number	Date	Document Description
BBB-99	5/6/2011	Memorandum from George Bridgers, NCDENR, to Herman Wong, EPA, RE: Model Clearinghouse Review of AERMOD-COARE as an Alternative Model for Application in an Arctic Marine Ice Free Environment
BBB-100	5/8/2011	Email from Herman Wong, EPA, to Andy Hawkins, EPA, RE: Approval Request for Non-Guideline Modeling - Shell Disco and Kulluk Dispersion Modeling
BBB-101	5/23/2011	Memorandum from Chris Hall, EPA, to Air Quality Modeling Permit Team, EPA, RE: Wainwright Air Monitoring Data Review - 09/13/09 through 12/31/10
BBB-102	6/1/2011	Arctic Permits Newsletter, Prepared by EPA
BBB-103	6/20/2011	Memorandum from Paul Boys, EPA, to Natasha Greaves, EPA, RE: Review Comments on the Shell Supplemental BACT Analysis for Seldom Used Engines
BBB-104	6/23/2011	Memorandum from Chris Hall, EPA, to David Bray, EPA, RE: EPA Region 10 Determination of Appropriate Background Values for the Chukchi Sea and Beaufort Sea OCS Permits
BBB-105	6/23/2011	Memorandum from Chris Hall, EPA, to Air Quality Modeling Permit Team, EPA, RE: Badami Air Monitoring Data Review - 12/01/09 through 12/31/10
BBB-106	6/23/2011	Memorandum from Chris Hall, EPA, to Air Quality Modeling Permit Team, EPA, RE: Deadhorse Air Monitoring Data Review - 1/1/10 through 12/31/10
BBB-107	6/23/2011	Memorandum from Chris Hall, EPA, to Air Quality Permit Modeling Team, EPA, RE: Point Lay Air Monitoring Data Review - 6/01/10 through 2/28/11
BBB-108	6/24/2011	Technical Support Document - Review of Shell's Supplemental Ambient Air Quality Impact Analysis for the Discoverer OCS Permit Applications in the Beaufort and Chukchi Seas, Prepared by EPA
BBB-109	6/24/2011	ADEC QAPP & Data Review Project List without Cost Info, Prepared by AES
BBB-110	7/6/2011	Offshore Drilling: Interior Starts Clock on Shell Arctic Proposal, Prepared by Phil Taylor
BBB-111	7/12/2011	Executive Order: Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska

November 14, 2011 Page 12 of 197

EPA Exhibit		
Number	Date	Document Description
BBB-112	7/18/2011	Technical Support Document - Review of Shell's Ambient Air Quality Impact Analysis for the Kulluk OCS Permit Application, Permit No. R10OCS030000, Prepared by EPA
BBB-113	7/22/2011	Statement of Basis for Draft Outer Continental Shelf Title V Air Quality Operating Permit No. R10OCS020000 - ConocoPhillips Company Jackup Drill Rig Chukchi Sea Exploration Drilling Program, Prepared by ConocoPhillips
BBB-114	7/22/2011	Statement of Basis for Draft Outer Continental Shelf Permit to Construct and Title V Air Quality Operating Permit No. R10OCS030000, Shell - Conical Drilling Unit Kulluk, Beaufort Sea Exploration Drilling Program
BBB-115	7/22/2011	Outer Continental Shelf Title V Air Quality Operating Permit Draft - Permit No. R10OCS020000, ConocoPhillips Company, Prepared by EPA
BBB-116	7/22/2011	Attachment A - Technical Support Document - ConocoPhillips Company Outer Continental Shelf Exploratory Drilling Program in the Chukchi Sea
BBB-117	7/22/2011	Outer Continental Shelf Permit to Construct and Title V Air Quality Operating Permit - Permit No. R10OCS030000, Shell Offshore Inc., Prepared by EPA
BBB-118	8/30/2011	Beaufort Sea - Outer Continental Shelf Lease Ownership Map
BBB-119	8/30/2011	Chukchi Sea - Outer Continental Shelf Lease Ownership Map
BBB-120	8/31/2011	NOAA Website: Nitrogen Dioxide 2004-2009 Description and Notable Features
BBB-121	9/2/2011	Statement by the President on the Ozone National Ambient Air Quality Standards, Prepared by The White House Office of the Press Secretary
BBB-122	9/2/2011	Letter from Cass Sunsetin, Office of Management and Budget, to Administrator Jackson, EPA, RE: Reconsideration of the 2008 Ozone Primary and Secondary National Ambient Air Quality Standards
BBB-123	Undated	Badami site-AQ Data (Attachments: Badami Validated met data Jul thru Sep 2010, Badami Validated met data Oct thru Dec 2010(3-3-11), and Validated met data 8-15-09 through 9-30-10(12-3-10))

November 14, 2011 Page 13 of 197

EPA Exhibit		
Number	Date	Document Description
BBB-124	Undated	Deadhorse site-AQ Data (Attachments: Deadhorse Hourly Data Quarter1 2010, Deadhorse Hourly Data Quarter2 2010, Deadhorse Hourly Data Quarter3 2010, Deadhorse Hourly Data Quarter4 2009, Deadhorse Hourly Data Quarter4 2010, Deadhorse Disk File Data 102309-123110, Deadhorse FEM PM25 Data 102309-123110, and Nov 2009 through Aug 2010 Deadhorse FEM-FRM)
BBB-125	Undated	Endicott SDI site-AQ Data (Attachments: BPXA Liberty 1-8, BPXA Liberty First Year Data, Endicott Findings Report, Liberty Ambient Pollutant Data, Response to ADEC Liberty SDI Monitoring Questions, and Transmittal Letter)
BBB-126	Undated	Prudhoe Bay CCP & A Pad sites-AQ Data (Attachments: 2006, 2007, 2008, 2009)
BBB-127	Undated	Pt Lay site-AQ Data (Attachments: 1007PTL, 1008PTL, PTL 100601 100831, PTL 100901 101130, and PTL 101201 110228)
BBB-128	Undated	Wainwright site-AQ Data (Attachments: Zero Air Background Test Results April 2010, WPS 0410, WPS 0510, WPS 0610, WPS 0710, WPS 0810, WPS 0909, WPS 0909 Rev 4 22 2010, WPS 0910, WPS 1009, WPS 1009 Rev 4 22 2010, WPS 1010, WPS 1109, WPS 1109 Rev 4 22 2010, WPS 1110, WPS 1209, WPS 1209 Rev 4 22 2010, WPS 1210, WPS 0110, WPS 0210, WPS 0310, and WPS 2010)
BBB-129	Undated	Merriam-Webster's Collegiate Dictionary, Tenth Edition (Various Terms: bughouse-bulletin, constative-consult, equivalent-erica)
BBB-130	Undated	Lease Map - Beaufort Sea, Post-1995 OCS OPD Grid, Prepared by Shell
BBB-131	Undated	Appendix A – Terms, Definitions, Abbreviations
BBB-132	Undated	Appendix B – Program References and Citations
BBB-133	Undated	Appendix C – Supporting Documents
BBB-134	Undated	Appendix D – Standard Operating Procedures, Prepared by SLR

November 14, 2011 Page 14 of 197

EPA Exhibit Number	Date	Document Description
BBB-135	Undated	Kaktovik Aerial Site Photo
BBB-136	Undated	Appendix A – Data Processing Specifications and Statistical Formulae, Version 1
BBB-137	Undated	Appendix A – Data Processing Specifications and Statistical Formulae, Version 2
BBB-138	Undated	Appendix B – Precision Data
BBB-139	Undated	Appendix C – Accuracy Data
BBB-140	Undated	Appendix D – Validated Continuous Data Summaries, Version 2
BBB-141	Undated	Appendix D – Validated Continuous Data Summaries, Version 1
BBB-142	Undated	Appendix E – Validated Manual Particulate Data
BBB-143	Undated	BPXA Prudhoe Bay Monitoring Map
BBB-144	Undated	EPA's Endangerment Finding - Frequently Asked Questions
BBB-145	Undated	AERMOD files for Disco RTC (Attachments: 2009a, 2009b, 2010a, 2010b, readme, shell reanalysis with 2010 met)
BBB-146	1/1/2011	USGS, An Evaluation of the Science Needs to Inform Decisions on Outer Continental Shelf Energy Development in the Chukchi and Beaufort Seas, Alaska
BBB-147	3/18/2011	Report to Congress on Black Carbon, External Peer Review Draft, Department of the Interior, Environment, and Related Agencies - Appropriations Act, 2010

November 14, 2011 Page 15 of 197

EPA Exhibit	Data	Do over out Description
Number	Date	Document Description
BBB-148	2/25/2011	ConocoPhillips, Outer Continental Shelf Air Permit Application Amendment Volume I, Chukchi Sea, Devil's Paw Prospect
BBB-149	3/11/2011	Letter from Zeena Siddeek, ADEC, to Robert Brown, Usibelli Coal Mine, Inc., RE: Usibelli ADEC TV Permit
BBB-150	9/14/2011	2011 ADEC Modeling Review Procedures Manual, Prepared by ADEC
BBB-151	3/11/2011	Federal Register, Final Rule - Utah Sulfur Dioxide Plan, 50 FR 7057
BBB-152	4/30/1987	Memorandum from G.T. Helms, EPA, to Steve Rothblatt, EPA, RE: Ambient Air
BBB-153	6/29/2010	Memorandum from Stephen D. Page, EPA, to Regional Air Division Directors, EPA, RE: NO ₂ Guidance

Return to Section BBB

Return to Table of Contents

November 14, 2011 Page 16 of 197

Section CCC: Supplemental Correspondence and Communication between EPA and Shell (including Shell contractors)

	neii contractoi	
EPA Exhibit		
Number	Date	Document Description
Number	Date	Document Description
CCC-1	4/1/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Coordinates for the Nuiqsut Station
CCC-2	4/7/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Q4 Report (Attachment: Page 9 from FINAL Badami AQ Met Monitoring Report Q4 2009 (Shell Comments 3-3-10) ri-2)
CCC-3	4/7/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: Shell Point Lay QAPP Review
CCC-4	4/27/2010	Email from Steve Mackey, Hoefler, to Herman Wong, EPA, RE: QAPP Submittal for Shell - Endicott/Endeavor Island Temperature Profiler Project
CCC-5	4/29/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: Pt Lay QAPP Status & Our Difficulty Getting Quote for NPAP & PM2.5 PEP Audits
CCC-6	5/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Alaska PSD PEP/NPAP audits
CCC-7	5/20/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non-federal travel funds
CCC-8	5/25/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Monitoring QAPP
CCC-9	5/25/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Monitoring QAPP
CCC-10	6/8/2010	Email from Herman Wong, EPA, to Alan Schuler, DEC, RE: QAPP Submittal For Shell - Endicott/Endeavor Island Temperature (Attachment: Shell Endeavor Island QAPP)
CCC-11	6/9/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Talking points for tomorrow's meeting
CCC-12	6/10/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Reindeer Island Data

November 14, 2011 Page 17 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-13	6/11/2010	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: Reindeer Island Q2 2009 Report
CCC-14	6/15/2010	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: AQ and Met Data
CCC-15	6/15/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Reindeer Island Reports
CCC-16	6/15/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q1 2010 Monitoring Report
CCC-17	6/16/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell RE: NO2./NOx In-stack Ratios (Attachment: Master-NO2+NOxRatios)
CCC-18	6/17/2010	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: Master-NO2+NOxRatios (Attachment: Master-NO2+NOxRatios)
CCC-19	6/18/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non-federal travel funds
CCC-20	6/28/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: July Meeting
CCC-21	6/28/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Reindeer Island; Jan to Mar 2010 Meteorological Data (Attachment: JAN-MAR2010@FIL)
CCC-22	6/28/2010	Email from Herman Wong, EPA, to Bob Baxter, T&B, RE: Preliminary Profiler vs. Radiosonde Results for Launches 4 - 7 (Attachments: Launch 4 bin avgs, Launch 7 Sonde Track, Launch 4 Sonde Track, Launch 5 bin avgs, Launch 5 Sonde Track, Launch 6 bin avgs, Launch 6 Sonde Track, and Launch 7 Sonde Track)
CCC-23	6/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non-federal travel funds
CCC-24	6/30/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Start Time for 15 July 2010
CCC-25	7/7/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: potential PEP auditor contact

November 14, 2011 Page 18 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-26	7/8/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: potential PEP auditor contact
CCC-27	7/12/2010	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: NO2/NOx in-stack ratios
CCC-28	7/15/2010	Email from Robert Elleman, EPA, to David Johnson, AMSTech, RE: comments to audit report (Attachment: Review of Draft audit report v2)
CCC-29	7/15/2010	Email from Robert Elleman, EPA, to Ken Richmond, ENVIRON, RE: radiometrics article
CCC-30	7/16/2010	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: Reindeer Island Meteorological Monitoring Program 2009 Annual Report
CCC-31	7/19/2010	Email from Robert Elleman, EPA, to Bob Baxter, Technical & Business Systems, RE: Endeavor Is. Audit Report (Profiler)
CCC-32	7/20/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Action Items from Meeting of 15 July 2010
CCC-33	7/29/2010	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: [Transfer Reminder] Reindeer Island Meteorological Monitoring Program 2009 Annual Report
CCC-34	8/4/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: QAPP for the Shell Point Lay Air Monitoring System
CCC-35	8/4/2010	Email from Herman Wong, EPA, to David Johnson, AMSTech, RE: Quality Assurance Audit Report of 27 July 2010
CCC-36	8/5/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: GHE 1-hour NO2 and SO2
CCC-37	8/6/2010	Email from Robert Elleman, EPA, to J.B. Dennison, SLR Consulting, RE: Conference Call to Discuss Observations and Recommendations related to MTP 5-P at Endeavor Island, AK
CCC-38	8/6/2010	Letter from Peter Slaiby, Shell, to Dennis McLerran, EPA, RE: Shell and EPA Region 10 Planning Meeting - August 13, 2010 Seattle, Washington

November 14, 2011 Page 19 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-39	8/9/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: August 12 Shell & R10 Meeting
CCC-40	8/9/2010	Email from J.B. Dennison, SLR Consulting, to Herman Wong, EPA, RE: COMMENTS ON: EPA Telecon Agenda Items
CCC-41	8/10/2010	Email from Herman Wong, EPA, to Clive Lee, Kipp & Zonen, RE: Conference Call Number for MTP 5-P at Endeavor Island, AK Discussion.
CCC-42	8/10/2010	Email from Herman Wong, EPA, to Bob Baxter, Technical & Business Systems, RE: Endicott Sounder Temperature Profiles - May, June, July, August (Attachments: tpot.2010.08.sounding, temp.2010.05.sounding, temp.2010.06.sounding, temp.2010.07.sounding, temp.2010.08.sounding, tpot.2010.05.sounding, tpot.2010.06.sounding, and tpot.2010.07.sounding)
CCC-43	8/10/2010	Email from Robert Elleman, EPA, to Ken Richmond, ENVIRON, RE: Endicott Sounder Temperature Profiles - May, June, July, August
CCC-44	8/10/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Shell Near-Term Modeling Concepts Memo
CCC-45	8/10/2010	Email from Herman Wong, EPA, to Clive Lee, Kipp & Zonen, RE: Update of items for discussion during 11 August 2010 conference call
CCC-46	8/11/2010	Email from Ken Richmond, ENVIRON, to Robert Elleman, EPA, RE: Endicott Sounder Temperature Profiles - May, June, July, August (Attachment: prof-vs-tower)
CCC-47	8/12/2010	Email from Eric Hansen, ENVIRON, to Natasha Greaves, EPA, RE: Shell OCS Source Test Update (Attachment: Test schedule update let 081010)
CCC-48	8/12/2010	Email from Steve Mackey, Hoefler, to Christopher Hall, EPA, RE: Update on NPAP & PEP Audits
CCC-49	8/12/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Draft Radiometer Guidance V 10 (Attachment: Draft radiometer guidance v10.)
CCC-50	8/13/2010	Email from J.B. Dennison, Hoefler, to Christopher Hall, EPA, RE: Nice talking with you

November 14, 2011 Page 20 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-51	8/16/2010	Meeting Notes: August 13, 2010 Meeting Between Shell and EPA, Prepared by Janis Hastings, EPA
CCC-52	8/17/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Afterthoughts from 12 August 2010 Meeting (Attachment: ThoughtsFrom20100812Mtg)
CCC-53	8/17/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: charts from meeting
CCC-54	8/17/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Station QAPP
CCC-55	8/23/2010	Email from Herman Wong, EPA, to Roger Steen, Air Sciences, RE: Coordination between Shell and CPAI on WRF MMIF
CCC-56	8/23/2010	Email from Herman Wong, EPA, to Nicole St. Amand, RE: Preliminary Sonde Launches (Attachment: Preliminary launch results v2 081810)
CCC-57	8/25/2010	Email from Herman Wong, EPA, to Nicole St. Amand, RE: Badami - 15 AUG 09 TO 31 DEC 09 (Attachments: AUG09- SEP09, AUG09-SEP09NOS, OCT09-DEC09, OCT09- DEC09NOS, 2009, and 2009NOS)
CCC-58	8/25/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Badami Met - 15 Aug 09 to 31 Dec 09 (Attachments: AUF09-SEP09FIL, OCT09-DEC09FIL, and 2009FIL)
CCC-59	8/25/2010	Email from Herman Wong, EPA, to Dominic Shallies, SLR Consulting, RE: Shell- Pt. Lay Monitoring Monthly Report (Attachment: 1006)
CCC-60	8/26/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Call with BP
CCC-61	8/27/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Collaboration and data collection
CCC-62	8/31/2010	Email from Herman Wong, to Bob Baxter, Technical & Business Systems, RE: Supplemental calibrations, next audit date, and updated profiler specs
CCC-63	9/2/2010	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: Scheduled Conference Call

November 14, 2011 Page 21 of 197

EPA Exhibit Number	Date	Document Description
CCC-64	9/5/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 2009 4th Qtr Data Measurements at Wainwright Permanent (Attachments: AQ@2009 - 4thQtr and MET@2009 - 4thQtr)
CCC-65	9/6/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 2010 1st Qtr Data Measurements at Wainwright Permanent (Attachments: AQ@2010 - 1stQtr and MET@2010 - 1stQtr)
CCC-66	9/7/2010	Email from Tim Martin, Air Sciences, To Herman Wong, EPA, RE: Shell Near-Term Modeling Concepts Memo
CCC-67	9/14/2010	Email from Robert Elleman, EPA, to J.B. Dennison, SLR Consulting, Endicott Temperature Profiler Monthly Data Deliverables (July & Aug)
CCC-68	9/14/2010	Email from Herman Wong, EPA, Bob Baxter, Technical & Business Systems, Endicott Temperature Profiler Monthly Data Deliverables (July & Aug)
CCC-69	9/14/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: PM2.5 Collocation Question
CCC-70	9/15/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Thursday, 23 September 2010 Meeting
CCC-71	9/16/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: Proposed Teleconference on PM2.5 Collocation Frequency
CCC-72	9/20/2010	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Thursday, 23 September 2010 Meeting
CCC-73	9/21/2010	Email from Steve Mackey, SLR Consulting, to Doug Hardesty, EPA, RE: Collocated Conference call with SLR/AECOM
CCC-74	9/21/2010	Email from Robert Elleman, EPA, to Bob Baxter, Technical & Business Systems, RE: Some information on K&Z technique plus inversion paper (Attachments: AKArcticCoastInversionPaper, troitsky_ieeetgrs_1993, westwater_monwearev_1972, westwater_radiosci_1998, kadygrov_icuc_2003, westwater_atot_1999, and kadygrov_meteorolappl_1998)
CCC-75	9/21/2010	Email from Steve Mackey, Hoefler, to Doug Hardesty, EPA, RE: Invitation - Collocated Conference call with SLR/AECOM (Attachment: (Unnamed))

November 14, 2011 Page 22 of 197

EPA Exhibit Number	Date	Document Description
CCC-76	9/24/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: My highlights of 23 September 2010 Meeting
CCC-77	9/24/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: My highlights of 23 September 2010 Meeting
CCC-78	9/24/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: My highlights of 23 September 2010 Meeting
CCC-79	9/24/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: sjvapcd no2/nox
CCC-80	9/25/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: NO2/NOx Ratios from Source Testings of Shell Vessels (Attachment: SampleInstackRatioTable)
CCC-81	9/28/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: How about these words?
CCC-82	9/29/2010	Email from Brad Thomas, ConocoPhillips, to Herman Wong, EPA, RE: Summary of all Wainwright data available to R10
CCC-83	10/3/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Summary of all Wainwright data available to R10
CCC-84	10/18/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Proposed Agenda Items
CCC-85	10/20/2010	Email from Natasha Greaves, EPA, to Greg Homer, Shell, RE: Shell Offshore Inc., Alaska Beaufort Sea Exploration Program
CCC-86	10/20/2010	Email from Nicole St. Amand, Shell, to Natasha Greaves, EPA, RE: Shell Offshore Inc., Alaska Beaufort Sea Exploration Program (Attachment: Shell Beaufort Sea EP update (3))
CCC-87	10/20/2010	Email from Herman Wong, EPA, to Dominic Shallies, SLR Consulting, RE: Shell Monthly Reports for July, August 2010
CCC-88	10/22/2010	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Meeting Notes

November 14, 2011 Page 23 of 197

EPA Exhibit Number	Date	Document Description
CCC-89	10/22/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Use of AERMOD+COARE
CCC-90	10/22/2010	Email from Natasha Greaves, EPA, to Eric Hansen, ENVIRON, RE: Contact Information for Call on 10/28
CCC-91	10/25/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Endeavor Island Meteorological Monitoring Program
CCC-92	10/26/2010	Email from Herman Wong, EPA, to King Richmond, ENVIRON, RE: Equiv Demo Memo
CCC-93	10/26/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Pairing of Background and Predicted Hourly Impacts for Each Hour and Receptor
CCC-94	10/26/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Use of AERMOD+COARE
CCC-95	10/28/2010	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Elleman and Wong edits to meeting notes of 21 October 2010 (Attachment: R10Edits@MeetingNotes21October2010)
CCC-96	10/31/2010	Email from Herman Wong, EPA, to Dominic Shallies, SLR Consulting, RE: Point Lay Monthly Reports for June, July, August 2010; Part 1 - Meteorology (Attachments: MET@1006PTL.FIL, MET@1007PTL.FIL, and MET@1008PTL.FIL)
CCC-97	10/31/2010	Email from Herman Wong, EPA, to Dominic Shallies, SLR Consulting, RE: Point Lay Monthly Reports for June, July, August 2010; Part 2 - Air Quality (Attachments: AQ@1006PTL.AQS, AQ@1007PTL.AQS, AQ@1008PTL.AQS, AQ@1006PTL.ER1, AQ@1007PTL.ER1, AQ@1008PTL.ER1, AQ@1006PTL.NOS, AQ@1007PTL.NOS, and AQ@1008PTL.NOS)
CCC-98	11/4/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Proposed Agenda for 09 November 2010 Meeting
CCC-99	11/8/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Badami Meteorological Data Validation (Attachments: SEP09.FIL, AUG09.FIL, DEC09.NOS, NOV 09.FIL, OCT09.FIL, MAR2010.FIL, FEB2010.FIL, JAN2010.FIL, JUN2010.FIL, MAY2010.FIL, and APR2010.NOS)
CCC-100	11/9/2010	Email from Herman Wong, to Ken Richmond, ENVIRON, RE: Nov 10 COARE-AERMOD presentation

November 14, 2011 Page 24 of 197

EPA Exhibit Number	Date	Document Description
CCC-101	11/10/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: AERMOD-COARE Evaluations (corrected version)
CCC-102	11/11/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Corrected Draft Agenda for R 10/AQMG/Shell GoToMeeting
CCC-103	11/14/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse 2.5PM Station Q4 2009 Monitoring Report
CCC-104	11/14/2010	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Reindeer Island and Badami Q 3 2010 Reports
CCC-105	11/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q4 2009 Data Summary
CCC-106	11/15/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Q2 Data Report
CCC-107	11/15/2010	Email from Robert Elleman, EPA, to Ken Richmond, ENVIRON, RE: Invitation: GoToMeeting Invitation - R10/AQMG/Shell Meeting on AERMOD-COARE. Meeting starts at 9:30PST, GoToMeeting setup at 9:15 (Nov 22 09:15 AM PST in See GoToMeeting information below)
CCC-108	11/16/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell RE: Agenda for 22 November 2010 Go To Meeting (Attachment: ShellMeetingAgenda-22 November2010)
CCC-109	11/19/2010	Email from Herman Wong, EPA, to Steve Mackey, SLR Consulting, RE: PT Thomson Met Data
CCC-110	11/20/2010	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Conf. call
CCC-111	11/22/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Agenda for 22 November 2010 Go To Meeting
CCC-112	11/22/2010	Email from Robert Elleman, EPA, to Herman Wong, EPA, RE: Invitation: GoToMeeting Invitation - R10/AQMG/Shell Meeting on AERMOD-COARE. Meeting starts at 9:30PST, GoToMeeting setup at 9:15

November 14, 2011 Page 25 of 197

EPA Exhibit Number	Date	Document Description
CCC-113	11/23/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Agenda for 22 November 2010 Go To Meeting
CCC-114	11/24/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Pairing in time
CCC-115	11/26/2010	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: [Possible VIRUS!] AERMOD VOLUME Source Error
CCC-116	11/29/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Q3 2010 Data Report
CCC-117	11/29/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Station Q3 2010 Monitoring Report
CCC-118	12/9/2010	Email from Robert Elleman, EPA, to Kirk Winges, ENVIRON, RE: early draft results
CCC-119	12/13/2010	Email from Anthony Galligan, AECOM, to Janis Hastings, EPA, RE: Badami Annual Data Summary
CCC-120	12/15/2010	Email from Robert Elleman, EPA, to Kirk Winges, ENVIRON, RE: COARE AERMOD report
CCC-121	12/21/2010	Email from Duane Siler, Crowell & Moring, to Julie Vergeront, EPA, RE: Shell Position Paper (Attachment: Separate Source Position Paper)
CCC-122	12/22/2010	Email from Robert Elleman, EPA, to Kirk Winges, ENVIRON, RE: GoToMeeting Details: AERMOD COARE Dec 28th 10:30AM Pacific
CCC-123	12/23/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Finalized Wainwright Monitoring Program QAPP
CCC-124	12/23/2010	Email from Thomas Damiana, AECOM, to Brad Thomas, ConocoPhillips, RE: Wainwright Approved QAPP
CCC-125	1/5/2011	Email from Juliane Matthews, EPA, to Lance Tolson, Shell, RE: Shell/EPA Meeting

November 14, 2011 Page 26 of 197

EPA Exhibit	_	
Number	Date	Document Description
CCC-126	1/7/2011	Email from Roger Brode, EPA, to Ken Richmond, ENVIRON, Re: aermet bug
CCC-127	1/10/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: FW: BLOCKED NAME IN MAIL TO YOU (from < Wong.Herman@epamail.epa.gov>)
CCC-128	1/10/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: [TRANSFER REMINDER] Badami Annual Data Summary
CCC-129	1/10/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Radiometer/Rawinsonde comparison information (Attachment: RAB notes from the 1210 audit launches v0)
CCC-130	1/10/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Beta AERMOD (Attachments: aermod_exe_B10363.zip, aermod_source_B10363.zip, aermod_testcase_B10363.zip, and aermod_userguide_B10363.zip)
CCC-131	1/11/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: AERMOD Meeting
CCC-132	1/11/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Annual Data and Report
CCC-133	1/11/2011	Email from Roger Brode, EPA, to Bart Brashers, ENVIRON, RE: Beta AERMET/AERMOD
CCC-134	1/12/2011	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: Deadhorse PM2.5 Data
CCC-135	1/12/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Meetings during AMS, 24-28 January 2011
CCC-136	1/13/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse 2.5PM Data
CCC-137	1/16/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q1 2010 Monitoring Report
CCC-138	1/16/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q1 2010 Monitoring Report

November 14, 2011 Page 27 of 197

EPA Exhibit Number	Date	Document Description
CCC-139	1/18/2011	Email from Herman Wong, EPA, to J.B. Dennison, SLR Consulting, RE: Meeting Next Week
CCC-140	1/18/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Agenda for today's meeting (Attachment: Agenda-20110118)
CCC-141	1/19/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Notes on conference call
CCC-142	1/19/2011	Email from Herman Wong, EPA, to Doug Hardesty, EPA, RE: Accepted: Conference Call to Develop Agenda for KZ Meeting
CCC-143	1/19/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Follow up to yesterday's meeting
CCC-144	1/19/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Follow up to yesterday's meeting
CCC-145	1/20/2011	Email from Herman Wong, EPA, to J.B. Dennison, SLR Consulting, RE: Comments of KZ
CCC-146	1/21/2011	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Impact Modeling Protocol - Kulluk Floating Drilling Platform - Alaska OCS
CCC-147	1/24/2011	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: Critical Richardson number paper (Attachment: Pages200to204)
CCC-148	1/25/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Q3 and Q2 Data (Attachments: WPS 0910, WPS 0410, WPS 0510, WPS 0610, WPS 0710, and WPS 0810)
CCC-149	1/25/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: (No Subject)
CCC-150	1/28/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Cancelled, 10 February 2011 Modeling Protocol Meeting
CCC-151	1/28/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 10 February 2011 Meeting

November 14, 2011 Page 28 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-152	1/28/2011	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: YSU PBL (Attachment: Model_Zi.vs.pro_Zir)
CCC-153	2/2/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Thursday, 9:30 AM, 10 February 2011 Meeting
CCC-154	2/8/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Meeting Feb 9th Schedule (Attachment: Agenda 2-9-11)
CCC-155	2/8/2011	Email from Ken Richmond, ENVIRON, to Herman Wong, EPA, RE: North Slope Alaska NH3
CCC-156	2/9/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Meeting Notes (Attachments: Meeting Notes 1-18-11, Meeting Notes 11-9-10, Meeting Notes 9-23-10, Meeting Notes 8-12-10, Meeting Notes 10-21-10, Meeting Notes 7-15-2010, and Meeting Notes 6-10-10)
CCC-157	2/9/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q2 2010 Monitoring Report
CCC-158	2/9/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q2 Data Summary
CCC-159	2/10/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse FRM Data
CCC-160	2/10/2011	Email from Herman Wong, EPA, to Doug Hardesty, EPA, RE: Accepted: Kulluk Minor Source Monitoring Protocol
CCC-161	2/11/2011	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse FRM Data (Attachment: Nov 2009 through Aug 2010 Deadhorse FEM-FRM)
CCC-162	2/11/2011	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse 4th Qtr FEM Data (Attachment: Deadhorse Hourly Data Quarter4 2009)
CCC-163	2/14/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: AERMOD-COARE Information & Data Request; First Request (Attachment: Info&DataReq@V1)
CCC-164	2/15/2011	Email from Herman Wong, EPA, to Pauline Ruddy, Shell, RE: AERMOD-COARE Information & Data Request; First (Attachment: RequestInfo&DataReq@V1)

November 14, 2011 Page 29 of 197

EPA Exhibit	Data	Decompart Description
Number	Date	Document Description
CCC-165	2/16/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 24 Feb 2011 Meeting
CCC-166	2/18/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Followup 2-18-2011
CCC-167	2/18/2011	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA, RE: Response to Your Memo (Attachment: Response to February 14 Information Request)
CCC-168	2/21/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Meeting Next Week
CCC-169	2/22/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List (Attachment: Action Item List 2-22-11 Draft)
CCC-170	2/22/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse FEM Data
CCC-171	2/22/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Response to your memo
CCC-172	2/23/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Plan in case of winter weather
CCC-173	2/24/2011	Email from Brad Broker, SLR, to Christopher Hall, EPA, RE: Deadhorse QAPP & other documentation
CCC-174	2/24/2011	Email from Herman Wong, EPA, to Doug Hardesty, EPA, RE: AERMOD-COARE
CCC-175	2/27/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: After thoughts of meeting
CCC-176	2/28/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List
CCC-177	3/1/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q3 2010 Monitoring Report

November 14, 2011 Page 30 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-178	3/1/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Electronic Files for Kulluk Beaufort Application
CCC-179	3/1/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q3 2010 Data Summary
CCC-180	3/1/2011	Disc: Meteorological Files & COARE Program - Shell Alaska OCS Beaufort Sea Exploratory Drilling Program: Kulluk (Contents: aermet_beaufort_2009, aermet_beaufort_2010, aermet_chukchi_2009, aermet_chukchi_2010, co- aermod_beaufort_2009, co-aermet_beaufort_2010, co- aermod_chukchi_2009, co-aermod_chukchi_2010, COARE, environ-documents, profiler, QAPPs, README, unix2dos)
CCC-181	3/3/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Meeting Notes From February 10 and 24 Technical Meetings (Attachment: EPA-Shell Technical Meeting 2-10-11)
CCC-182	3/3/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Items and Meeting Minutes (Attachments: Action Item List 3-2-11 Redraft by EPA and Shell EPA Meeting 2-9-11 Minutes)
CCC-183	3/3/2011	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: NO2/NOx Spreadsheet from Kulluk Application
CCC-184	3/4/2011	Email from Anthony Galligan, AECOM, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report & Validated Data
CCC-185	3/4/2011	Email from LeapFILE to Anthony Galligan, AECOM, RE: Badami Fourth Quarter 2010 Data Report & Validated Data
CCC-186	3/4/2011	Email from LeapFILE to Anthony Galligan, AECOM, RE: wong.herman@epa.gov Successfully Downloaded Your Files
CCC-187	3/4/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Mailing Address
CCC-188	3/4/2011	Email from Anthony Galligan, AECOM, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report
CCC-189	3/4/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Digital Data

November 14, 2011 Page 31 of 197

EPA Exhibit	D. (
Number	Date	Document Description
CCC-190	3/5/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Fourth Quarter 2010 Data Report and Validated Data
CCC-191	3/7/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: COARE Clarification Request, and Second Information and Data Request (Attachment: Info&DataReq2@V3)
CCC-192	3/7/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Shelter Temperature Data
CCC-193	3/7/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Q4 2010 Data Report and Validated Data
CCC-194	3/7/2011	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: Badami Validated Data for 8-15-09 to 12-31-2010 (Attachment: Badami Project Validated Data (3-7-2011))
CCC-195	3/7/2011	Email from Christopher Hall, EPA, to Anthony Galligan, AECOM, RE: Badami Validated Data for 8/15/09 through 12/31/2010
CCC-196	3/8/2011	Email from Sara Glenn, Shell, to Gina McCarthy, EPA, RE: Update #2 - Shell Telecon with EPA
CCC-197	3/8/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Validated Data for 8/15/09 through 12/31/2010
CCC-198	3/8/2011	Email from Sara Glenn, Shell, to Gina McCarthy, EPA, RE: Update #3 - Shell Telecon with EPA
CCC-199	3/8/2011	Email from Herman Wong, EPA, to Nicole St. Amand, RE: Meeting Notes and Participants during the 06 May 2010 Meeting
CCC-200	3/8/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes for 3-2-2011 and 3-3-2011 Calls
CCC-201	3/8/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: co-aermod disks
CCC-202	3/8/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes From 3-4-11

November 14, 2011 Page 32 of 197

EPA Exhibit Number	Date	Document Description
CCC-203	3/8/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes From 3-4-11
CCC-204	3/8/2011	Email from Sara Glenn, Shell, to Doug Hardesty, EPA, RE: Invitation - Telecon-Shell & EPA
CCC-205	3/9/2011	Email from Pauline Ruddy, Shell, to Nancy Helm, EPA, RE: Shell Response to Chukchi and Beaufort Sea PSD Permits Remand (Attachment: Remand Order response 20110309)
CCC-206	3/9/2011	Email from Pauline Ruddy, Shell, to Nancy Helm, EPA, RE: Corrected Submittal for Shell Chukchi and Beaufort Sea PSD Permit Remand (Attachment: Remand Order response 20110309)
CCC-207	3/9/2011	Email from Doug Hardesty, EPA, to Mark Schindler, EPA, RE: Summary of 3-8-11 Shell Phone Call (Attachment: Shell OCS 2011 Schedule 3-9-11)
CCC-208	3/9/2011	Email from Doug Hardesty, EPA, to Pete Slaiby, Shell, RE: Shell Telephone Call Record for 1pm Pacific, 3-8-11
CCC-209	3/9/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse FEM Project Digital Data (Attachments: Deadhorse FEM PM25 Data 102309-123110 and Deadhorse Disk File Data 102309-123110)
CCC-210	3/9/2011	Email from Herman Wong, EPA, to Nicole St. Amand, RE: COARE Clarification Request, and Second Information and Data Request
CCC-211	3/9/2011	Letter from Susan Childs, Shell, to Doug Hardesty, EPA, RE: Shell Chukchi Sea and Beaufort Sea PSD Permits Remand, Shell Gulf of Mexico Inc. Permit R10OCS/PSD-AK-09-01, Shell Offshore, Inc. Permit R10OXCS/PSD-AK-2010-01
CCC-212	3/10/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: COARE Clarification Request, and Second Information and Data Request (Attachment: Responses to Information and Data Request Number 2 from Herman Wong to Shell)
CCC-213	3/11/2011	Email from LeapFILE, to Anthony Galligan, AECOM, RE: Reindeer Island Q4 2010 Data Summary Report and Validated Data
CCC-214	3/11/2011	Email from LeapFILE, to Anthony Galligan, AECOM, RE: wong.herman@epa.gov Successfully Downloaded Your Files

November 14, 2011 Page 33 of 197

EPA		
Exhibit Number	Date	Degument Description
CCC-215	3/13/2011	Document Description Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Reindeer Island Q4 2010 Data Summary Report and Validated Data
CCC-216	3/13/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: COARE Clarification Request, and Second Information and Data Request
CCC-217	3/13/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: COARE Clarification Request, and Second Information and Data Request
CCC-218	3/13/2011	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, COARE Clarification Request , and Second Information and Data Request
CCC-219	3/14/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Would you have time Monday?
CCC-220	3/14/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: COARE Clarification Request, and Second Information and Data Request (Attachment: ResponsesToInformationRequestNo2)
CCC-221	3/14/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: KZ Profiler
CCC-222	3/15/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Q4 2010 Reindeer Island Report and Data
CCC-223	3/15/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: COARE Clarification Request, and Second Information and Data
CCC-224	3/16/2011	Email from Julie Vergeront, EPA, to Kirk Lilley, Kirk Lilley PLLC, RE: Call re: Shell Disco permits on 3-16-11
CCC-225	3/16/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q4 2010 Monitoring Report
CCC-226	3/16/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q4 2010 Quarterly Data Summary
CCC-227	3/16/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Q4 2010 Quarterly Data Report

November 14, 2011 Page 34 of 197

EPA Exhibit Number	Date	Dogument Description
Number	Date	Document Description
CCC-228	3/17/2011	Email from Anthony Galligan, Shell, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report and Validated Data
CCC-229	3/17/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Updated Action Item List (Attachment: Action Item List 3-17-11 Accepted Final Shell Update)
CCC-230	3/18/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: March 18 shell submittal evaluation for SO2 and NO2 (Attachments: Discoverer NO2 SO2 Impact Modeling using AERMOD 20110318, Disco AERMOD modeling - letter, and GHG assurance memo)
CCC-231	3/18/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Agenda for Telecon Today (Attachment: Shell and R10 3-18 Agenda Final)
CCC-232	3/18/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes from 3-18-11
CCC-233	3/18/2011	Discoverer Drillship Impact Evaluation for SO2 and NO2 Using AERMOD, Chukchi and Beaufort Seas, Shell Alaska Exploratory Drilling Program, Prepared by Air Sciences
CCC-234	3/18/2011	Letter from Susan Childs, Shell, to Doug Hardesty, EPA, RE: Discoverer Drillship Impact Evaluation for SO2 and NO2 Using AERMOD - Shell Chukchi and Beaufort Seas, Alaska Exploratory Drilling Program and Assurance of Compliance with GHG Minor Source Limit
CCC-235	3/21/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: 14 February 2011 Responses,
CCC-236	3/21/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: AERMOD-COARE Decision Document
CCC-237	3/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Conversation to Discuss Incompleteness for Kulluk
CCC-238	3/24/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Agenda
CCC-239	3/24/2011	Information Update - Description has changed: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA

November 14, 2011 Page 35 of 197

EPA Exhibit Number	Date	Dogument Description
INUITION	Date	Document Description
CCC-240	3/24/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Question?
CCC-241	3/24/2011	Invitation: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-242	3/24/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-243	3/25/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Updated Action Item List (Attachment: 11)
CCC-244	3/25/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Draft Agenda for Workshops (Attachment: Shell-R10 Seattle Workshops Agenda Final)
CCC-245	3/25/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: COARE Clarification Request, and Second Information and Data Request
CCC-246	3/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Revised Workshop Agenda
CCC-247	3/28/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: (No Subject)
CCC-248	3/29/2011	Email from Julie Vergeront, EPA, to Kirk Lilley, Kirk Lilley PLLC, RE: Meetings with Shell on 3/25 and 3/26
CCC-249	3/29/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Lunch Orders for Thursday
CCC-250	3/29/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Memorial Obituaries Cole, Clifford
CCC-251	3/30/2011	Email from Kirk Lilley, Kirk Lilley PLLC, to Julie Vergeront, EPA, RE: Meeting tomorrow
CCC-252	3/30/2011	Email from Christopher Hall, EPA, to Brad Broker, SLR, RE: NPAP and PEP audits for PSD monitoring stations

November 14, 2011 Page 36 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-253	3/31/2011	Email from Herman Wong, EPA, to Nicole St. Amand, RE: The 8 CD's
CCC-254	3/31/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Did you get the CDs?
CCC-255	4/1/2011	ENVIRON Disc: COARE-AERMOD Model Evaluation Files, Shell Alaska OCS Beaufort Chukchi Sea Exploratory Drilling Program
CCC-256	4/5/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: PPT and CALPUFF
CCC-257	4/6/2011	Email from Suzanne Skadowski, EPA, to Nicole St. Amand, Shell, RE: Accepted: EPA / Shell Community Outreach Materials
CCC-258	4/7/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Detailed Beaufort Lease Map (Attachment: Beaufort Leases Ownership 32x17 v2a)
CCC-259	4/7/2011	Information Update - Description has changed: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-260	4/7/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: 2010 Prudhoe Info for Shell
CCC-261	4/7/2011	Invitation: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-262	4/7/2011	Email from Peter Slaiby, Shell, to Doug Hardesty, EPA, RE: Shell Telephone Call Record for 8:30am on 3-24-11
CCC-263	4/7/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
CCC-264	4/7/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Shell's Action Item Submittals (Attachments: Mooring Process, Combined, Mixing Height, Mooring Process Cover Letter, and NSBasemapPBCH)
CCC-265	4/7/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Update - Modeler to Modeler Discussion on Kulluk and Disco Submittals

November 14, 2011 Page 37 of 197

EPA Exhibit Number	Date	Document Description
CCC-266	4/7/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Update - Permit Writers Discussion on Kulluk and Disco Permits
CCC-267	4/8/2011	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: Badami Zero concentration test
CCC-268	4/9/2011	Email from Andy Hawkins, EPA, to Ken Richmond, ENVIRON, RE: Calpuff Files for Disco (Attachment: memo-calpuff)
CCC-269	4/11/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Modelers Call minutes
CCC-270	4/11/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: 04 08 11 Call Notes - Please Review (Attachments: 04 07 11 EPA Airsciences Call Notes R1 and 04 08 11 EPA Airsciences Call Notes R1)
CCC-271	4/11/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Call Today at 11 AST
CCC-272	4/11/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Particulate Station Q4 2010 Monitoring Report
CCC-273	4/12/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Final Draft Radiometer Guidance dated 040711 (Attachment: Draft radiometer guidance v15 040711)
CCC-274	4/12/2011	Email from Pauline Ruddy, Shell, to Alan Schuler, ADEC, RE: OLM olmgroup all question
CCC-275	4/12/2011	Email from Thomas Damiana, AECOM, to Brad Thomas, ConocoPhillips, RE: Deadhorse Particulate Station Q4 2010 Monitoring Report (Attachment: Deadhorse Hourly Data Quarter4 2010 Rev01)
CCC-276	4/13/2011	Email from Natasha Greaves, EPA, to Rodger Steen, Air Sciences, RE: Working comparison of emissions - Discoverer (Attachment: Discoverer PermitLimitesCompare 20110412)
CCC-277	4/13/2011	Email from Rodger Steen, Air Sciences, to Natasha Greaves, EPA, RE: Action Items From 4/11/11 Meeting
CCC-278	4/13/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Discoverer Mooring Process; Fuel limit; restrictions on location

November 14, 2011 Page 38 of 197

EPA		
Exhibit Number	Date	Document Description
CCC-279	4/13/2011	Email from Julie Vergeront, EPA, to Kirk Lilley, Kirk Lilley PLLC, RE: Discoverer Mooring Process; Fuel limit; restrictions on location
CCC-280	4/14/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: NO2 Modeling Question
CCC-281	4/15/2011	Email from Pauline Ruddy, Shell, to Dan Meyer, EPA, RE: Request for Check-In
CCC-282	4/17/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: (No Subject) (Attachments: Action Items Table-8 Final, EPA Submittal-Modeling Meeting Notes 4-7-11-FINAL, and Shell-DiscovererUpdate 20110415)
CCC-283	4/17/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Action Item List (Attachment: Shell Action Items Table 4-15-11 DH)
CCC-284	4/18/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Instructions for Paying Fees
CCC-285	4/18/2011	Email from Christopher Hall, EPA, to Steve Mackey, SLR, RE: NPAP and PEP audits for PSD monitoring stations
CCC-286	4/18/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
CCC-287	4/20/2011	Email from Andy Hawkins, EPA, to Tim Martin, Air Sciences, RE: Shell Items from April 7th Modelers Call (Attachment: To EPA - 04192011)
CCC-288	4/20/2011	Email From Andy Hawkins, EPA, to Tim Martin, Air Sciences, RE: Shell Items from April 7th Modelers Call (Attachment: AK Lease 201010 Disco Chukchi permit blocks)
CCC-289	4/20/2011	Email From Nicole St. Amand, Shell, to Natasha Greaves, EPA, RE: Disco PSD Compliance Question
CCC-290	4/21/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Recent EPA EAB Order on procedures for New Source Review Air Permits (Attachment: NSR Standing Order 4-19-2011)
CCC-291	4/21/2011	Information Update - There are multiple changes: Call with Pete Slaiby, Shell Oil & Dennis McLerran, EPA R10

November 14, 2011 Page 39 of 197

EPA		
Exhibit Number	Data	Dogument Description
CCC-292	Date 4/21/2011	Document Description Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Action Item List (Attachment: Shell Action Items Table 4-20-11 DH)
CCC-293	4/21/2011	Rescheduled: Call with Pete Slaiby, Shell Oil & Dennis McLerran, EPA R10
CCC-294	4/21/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: New Disco-Kulluk Schedules
CCC-295	4/21/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Annual 2010 Data Report
CCC-296	4/21/2011	Email from Thomas Damiana, AECOM, to Brad Thomas, ConocoPhillips, RE: Wainwright Permanent Station Annual 2010 Monitoring Report
CCC-297	4/22/2011	Email from Tim Martin, Air Sciences, to Andy Hawkins, EPA, RE: Pairing of monitored/modeled data
CCC-298	4/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Additional Information Submittal for Discoverer PSD and Kulluk Minor Source (Attachments: Regulatory ApplicabilityMJS, 20110422 Monitoring Methods Matrix MJS, CIA-Discoverer-R1- 2MJS Final, Kulluk Beaufort EI AllowableAndPotential 20110421, OCS BLOC, OCS Blocks 28 Fig1 Detail v2c, and anchor handling 2 final)
CCC-299	4/25/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Request for Telecon
CCC-300	4/28/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Stack test data
CCC-301	4/28/2011	Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-302	4/29/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Alternate NO2 Modeling for Discoverer (Attachment: Alternate NO2 Modeling - Disco 04292011)
CCC-303	4/29/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Shell Action Item List (Attachment: Shell Action Items Table 4-28-11 DH)

November 14, 2011 Page 40 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-304	4/29/2011	Technical Memorandum from Tim Martin, Air Sciences, to Pauline Ruddy, Shell, RE: Alternate Approaches to Evaluating 1-Hour NO2 Impacts for the Shell Discoverer Drillship - NO2 Pairing and NO2/NoX Ratios, Prepared by Tim Martin, Air Sciences
CCC-305	5/2/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-306	5/2/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
CCC-307	5/2/2011	Email from Dennis McLerran, EPA, to Doug Hardesty, EPA, RE: Confirmed - Call with Pete Slaiby, Shell-AK, and Dennis McLerran, EPA
CCC-308	5/3/2011	Email from Alessandra Carreon, ENVIRON, to Natasha Greaves, EPA, RE: Follow up to voicemail
CCC-309	5/3/2011	Associated Fleet Testing Reports – Chukchi Sea and Beaufort Sea Exploration Drilling Programs, Prepared by Emission Technologies, Inc.
CCC-310	5/3/2011	2010 Discoverer Air Emissions Testing – Chukchi Sea and Beaufort Sea Exploration Drilling Programs, Prepared by Emission Technologies, Inc.
CCC-311	5/6/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: ETP QAPP
CCC-312	5/6/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Link to BOEMRE Website for Camden Bay EP
CCC-313	5/7/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Shell's Alternative Model Approval
CCC-314	5/7/2011	Email from Dennis McLerran, EPA to Pete Slaiby, Shell, RE: EPA Headquarters Approval of Shell's Alternative Model
CCC-315	5/10/2011	Email from Eric Hansen, ENVIRON, to Natasha Greaves, EPA, RE: Meeting tomorrow?
CCC-316	5/10/2011	Email from Sabrina Pryor, Air Sciences, to Doug Hardesty, EPA, RE: Kulluk Application References

November 14, 2011 Page 41 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-317	5/12/2011	Email from Dough Hardesty, EPA, to Mark Schindler, Octane, RE: Telephone Update
CCC-318	5/13/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List Updates (Attachment: Action Item Table 51311 Updates)
CCC-319	5/16/2011	Cancelled: Call with Pete Slaiby/Shell-AK and Michelle Pirzadeh/EPA
CCC-320	5/16/2011	Information Update - There are multiple changes: Call with Pete Slaiby/Shell-AK and Michelle Pirzadeh/EPA
CCC-321	5/16/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
CCC-322	5/17/2011	Email from Eric Hansen, ENVIRON, to Natasha Greaves, EPA, RE: I agree
CCC-323	5/18/2011	Email from Kirk Lilley, Kirk Lilley PLLC, to Juliane Matthews, EPA, RE: Shell Chukchi Sea Exploration Plan
CCC-324	5/19/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Response to EAB comment on BOEMRE regulations
CCC-325	5/19/2011	Email from Andy Hawkins, EPA, to Tim Martin, Air Sciences, RE: AERMOD Air Quality Impact Analysis-Shell Discoverer (Attachment: AERMOD Impacts - Disco 05192011)
CCC-326	5/19/2011	Email from Natasha Greaves, EPA, to Eric Hansen, ENVIRON, RE: Word Version of the Permits (Attachments: Shell Beaufort Permit Final Version 04-09-10 and Shell Chukchi Permit 3-26-10 Final)
CCC-327	5/19/2011	Email from Sabrina Pryor, Air Sciences, to Natasha Greaves, EPA, RE: Discoverer Emission Inventory (Attachments: Discoverer EI 20110519 D and Discoverer EI 20110517-GHGOnly)
CCC-328	5/19/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Friday Telecon to discuss Stack Tests
CCC-329	5/19/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Profiler QAPP and Engine replacement confirmation

November 14, 2011 Page 42 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-330	5/20/2011	Email from Andy Hawkins, EPA, to Tim Martin, Air Sciences, RE: AERMOD Air Quality Impact Analysis - Shell Discoverer
CCC-331	5/20/2011	Email from Eric Hansen, ENVIRON, to Natasha Greaves, EPA, RE: H2SO4 emissions at 100 ppmw (Attachment: Discoverer EI 20110519-H2SO4-100ppm)
CCC-332	5/20/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Friday Telecon to discuss Stack Tests
CCC-333	5/20/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Mooring Process Teleconference
CCC-334	5/20/2011	Email from Tim Martin, Air Sciences, to Andy Hawkins, EPA, RE: Point Lay Ambient Air Quality Data (Attachment: Pt Lay Data (June - Nov 2010))
CCC-335	5/20/2011	Email from Rebecca Van Wyck, SLR, to Christopher Hall, EPA, RE: Point Lay QAPP and Quarterly Data Summary Reports Submittals
CCC-336	5/23/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Link to Chukchi Sea EP Public Information Copy (Attachment: Chukchi Sea EP Public Information Copy)
CCC-337	5/23/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item list
CCC-338	5/24/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Action Item List (Attachment: Action Item Table 52311 Updates Rev 4)
CCC-339	5/25/2011	Email from Eric Hansen, ENVIRON, to Natasha Greaves, EPA, RE: Proposed Beaufort PSD permit changes (Attachment: Revised Beaufort Permit 052511)
CCC-340	5/27/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Mooring Process for Noble Discoverer Drillship (Attachment: Disco Drillship Disconection and Departure Supplement Final MJS)
CCC-341	5/30/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Meeting to Review Disco
CCC-342	5/31/2011	Email from Andy Hawkins, EPA, to Tim Martin, Air Sciences, RE: Inventory question (Attachment: Summary of Annual Emissions)

November 14, 2011 Page 43 of 197

EPA Exhibit Number	Date	Document Description
CCC-343	5/31/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
CCC-344	5/31/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Final 'Clean' Package Description
CCC-345	5/31/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and Michelle Pirzadeh/EPA
CCC-346	6/1/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: EPA Signed and Approved Endeavor Island Temperature Profiler QAPP Submittal (Attachment: Signed Shell Endeavor Island QAPP rv2.1)
CCC-347	6/2/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Disco Chukchi allowable emissions (Attachment: Discoverer EI Chukchi 20110602 D)
CCC-348	6/6/2011	Email from Eric Hansen, ENVIRON, to Natasha Greaves, EPA, RE: Chat
CCC-349	6/6/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List and Request for Call (Attachment: Action Item Table 6 3 11 Updates MJS)
CCC-350	6/6/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Action Item List and Request for Call (Attachment: Action Item Table 6 3 11 Updates MJS)
CCC-351	6/7/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Update – EPA & Shell Air Call
CCC-352	6/7/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Discussion about EJ analysis
CCC-353	6/8/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Response to questions from R10
CCC-354	6/8/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Final 'Clean' Package Description
CCC-355	6/9/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Quick Conference call re: modeling

November 14, 2011 Page 44 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-356	6/10/2011	Email from Eric Hansen, ENVIRON, to Dave Bray, EPA, RE: We're on our way
CCC-357	6/10/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: BACT and modeling questions (Attachments: Seldom Used Sources BACT 061011 and ResponsetoVerbalRequestsfromEPAon6-9-11)
CCC-358	6/10/2011	Email from Rebecca Van Wyck, SLR, to Christopher Hall, EPA, RE: Kaktovik Ambient Air and Meteorological Monitoring Program QAPP
CCC-359	6/13/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
CCC-360	6/13/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-361	6/13/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Permit Conditions for Discoverer
CCC-362	6/19/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Revised EPA policy on ambient air boundary
CCC-363	6/20/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Schedule for next couple of days
CCC-364	6/21/2011	Email from Alessandra Carreon, ENVIRON, to Suzanne Skadowski, EPA, RE: Shell Disco final submittal disc
CCC-365	6/21/2011	Email from Christopher Hall, EPA, to Brad Broker, SLR, RE: Pt Lay data review
CCC-366	6/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Invitation - EPA discussion on Permit Conditions for GHG
CCC-367	6/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Rescheduled - EPA discussion on Permit Conditions for GHG
CCC-368	6/22/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Thursday Call

November 14, 2011 Page 45 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-369	6/23/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: GHG calculation information (Attachments: EPA drill mud gas volume and Methane calc_20101022)
CCC-370	6/23/2011	Email from Christopher Hall, EPA, to J.B. Dennison, SLR, RE: Point Lay BAM 1020 monthly quality control checks
CCC-371	6/23/2011	Email from Steve Mackey, SLR, to Christopher Hall, EPA, RE: Info on Pt Lay Data reports & Revised QAPP (Attachments: PTL 100522 BAM Zero and PTL 110518 BAM Zero)
CCC-372	6/27/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: OTM 13
CCC-373	6/27/2011	Information Update - Room has changed: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
CCC-374	6/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Please send permit to myself and Nicole
CCC-375	6/27/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
CCC-376	6/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Draft Disco Beaufort Permit (Attachments: Shell Beaufort Permit Final Version 04-09-10, Shell Beaufort Permit Compare Final Draft Version [06-27-11], Shell Beaufort Permit Final Draft Version [06-27-11])
CCC-377	6/28/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: call in for 10 AM?
CCC-378	6/28/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Call in number for permit discussion today at 11:00am pacific
CCC-379	6/28/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Disco permit - typos
CCC-380	6/28/2011	Email from Pauline Ruddy, Shell, to Janet McCabe, EPA, RE: Invitation: Shell PM2.5 Increment Call
CCC-381	6/28/2011	Email from Nicole St. Amand, Shell, to Janet McCabe, EPA, RE: Invitation: Shell PM2.5 Increment Call

November 14, 2011 Page 46 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-382	6/28/2011	Email from John Iani, Perkins Coie, to Doug Hardesty, EPA, RE: (No Subject)
CCC-383	6/28/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Emission Limit Check (Attachment: Emission limit check062811)
CCC-384	6/28/2011	Email from Eric Hansen, ENVIRON, to Doug Hardesty, EPA, RE: Emission comparison (Attachment: Emission limit check 062811)
CCC-385	6/28/2011	Email from Alan Schuler, EPA, to Doug Hardesty, EPA, RE: Portable Hard-drive Received
CCC-386	6/29/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Chukchi Draft Permit (Attachments: Shell Chukchi Permit 3-26-10 Final, Shell Chukchi Permit Compare Final Draft Version [6-28-11], and Shell Chukchi Permit Final Draft Version [6-28-11])
CCC-387	6/29/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Stack height/modeling issue
CCC-388	6/29/2011	Email from Doug Hardesty, EPA, to Nicole St. Amand, Shell, RE: Meeting on Chukchi
CCC-389	6/29/2011	Email from Doug Hardesty, EPA, to Nicole St. Amand, Shell, RE: Meeting on Chukchi
CCC-390	6/29/2011	Email from Rodger Steen, Air Sciences, to Dave Bray, EPA, RE: Modification of resupply ship compliance condition
CCC-391	6/29/2011	Email from Doug Hardesty, EPA, to Rodger Steen, Air Sciences, RE: OSV Conditions and Limits Comparison (Attachments: OSV Conditions and Emission limit check062811 andy edits)
CCC-392	6/29/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Revised text for OSR fleet (Attachment: Oil Spill Response Fleet Revised Conditions RGS)
CCC-393	6/29/2011	Email from Janet McCabe, EPA, to Doug Hardesty, EPA, RE: Rescheduled: Shell PM2.5 Increment Call
CCC-394	6/30/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Emission comparison Disco Beaufort 2010 to 2011 (Attachment: Emission limit check062811_andy edits)

November 14, 2011 Page 47 of 197

EPA Exhibit Number	Date	Document Description
CCC-395	7/1/2011	Email from Janis Hastings, EPA, to Peter Slaiby, Shell, RE: EPA Press Release - Air Permits
CCC-396	7/18/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and EPA
CCC-397	7/25/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Did you just try to call?
CCC-398	7/25/2011	Information Update - There are multiple changes: Call with Pete Slaiby/Shell-AK and EPA (Michelle P will be covering this call)
CCC-399	7/28/2011	Email from Pauline Ruddy, Shell, to Region 10 OCS Air Permits, EPA, RE: Shell's Discoverer Air Permit Public Comment
CCC-400	7/28/2011	Email from Pauline Ruddy, Shell, to Cindy Huang, EPA, RE: Request to cancel todays call
CCC-401	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell Discoverer Comments (Attachments: Shell comments on Disco permit, 8.5.11 Kivalina IRA Council comments, 08052011 AOGA CMTS Shell Discoverer Air Permits, AK DNR Comments PSD Air Permits Shell Discoverer, Alaska Wilderness League, AWL, et al Comments, Attachment part 1, AWL, et al Comments, Attachment part 2, AWL, et al Comments, Attachment part 3, AWL, et al Comments, Attachment part 5, AWL, et al Comments, Attachment part 6, AWL, et al Comments, Attachment part 7, AWL, et al. Comment to EPA on Draft Shell Supplemental PSD Permits, NSB AEWC ICAS comments re. Shell Air Permits (8.5.11), NWAB Disco Comments_August2011, PE EPA Air Permits letter 8-5-11, Rep Millett Disco Comments 08052011)
CCC-402	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell Draft Permit Comments #1 (Attachment: NSB AEWC ICAS comments re. Shell Air Permits (8.15.11))
CCC-403	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell permit comments #2 (Attachment: AWL, et al Comments, Attachment part 1)
CCC-404	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell permit comments #3 (Attachment: AWL, et al Comments, Attachment part 2)

November 14, 2011 Page 48 of 197

EPA		
Exhibit Number	Date	Document Description
CCC-405	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell permit comments #4 (Attachment: AWL, et al Comments, Attachment part 3)
CCC-406	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell permit comments #5 (Attachment: AWL, et al Comments, Attachment part 4)
CCC-407	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell permit comments #6 (Attachment: AWL, et al Comments, Attachment part 5)
CCC-408	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell permit comments #7 (Attachment: AWL, et al Comments, Attachment part 6)
CCC-409	8/8/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Shell Comment #8 (last one) (Attachment: AWL, et al Comments, Attachment part 7)
CCC-410	8/9/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Shell permit comments #2 (Attachment: AWL, et al. Comment to EPA on Draft Shell Supplemental PSD Permits)
CCC-411	8/15/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and EPA
CCC-412	8/18/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Discussion
CCC-413	8/18/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Discussion
CCC-414	8/19/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Update - Discussion
CCC-415	8/31/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: nanuq
CCC-416	8/31/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Nanuq visit
CCC-417	9/2/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Request Regarding Disco Met Data (Attachment: MetDataInfoReq_Final)

November 14, 2011 Page 49 of 197

EPA Exhibit		
Number	Date	Document Description
CCC-418	9/2/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 2 (Attachments: pt_lay_dec-jan2011, pt_lay_dec-feb2011)
CCC-419	9/2/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 1 (Attachments: pt_lay_sep-nov2010, pt_lay_sep-nov2010)
CCC-420	9/2/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 3 (Attachment: Shell Point Lay QAPP (Revision 1.1))
CCC-421	9/2/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 4 (Attachment: RI_QAPP_rev_03_03_08_2010)
CCC-422	9/2/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 5 (Attachments: Beaufort and Chukchi Buoy QAPP_120110_final_r5, wain-miss-2009, wain-miss-2010, ptlay-miss-2010, chuk-miss-2010, chuk-miss-2009)
CCC-423	9/6/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Call Today?
CCC-424	9/6/2011	Information Update - Description has changed: Call with Pete Slaiby/Shell-AK and EPA
CCC-425	9/6/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Request Regarding Disco Met Data (Attachments: MetDataInfoReq_ShellResponse, Missing Data Procedures to Support Permitting in the Chukchi)
CCC-426	9/6/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and EPA
CCC-427	9/7/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Clarification to your responses.
CCC-428	9/7/2011	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Buoy had redundant wind sensors
CCC-429	9/8/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: call in information-sorry!
CCC-430	9/8/2011	Email from Julie Vergeront, EPA, to Lance Tolson, Shell, RE: EPA Interactions

November 14, 2011 Page 50 of 197

EPA Exhibit Number	Date	Document Description
CCC-431	9/9/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Clarification to your responses.
CCC-432	9/11/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: proposed agenda for Sept 20
CCC-433	9/14/2011	Email from Julie Vergeront, EPA, to Kirk Lilley, Kirk Lilley PLLC, RE: Sept. 20 Shell-EPA Meeting
CCC-434	9/14/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Need EPA Referenced Document
CCC-435	9/14/2011	Documents transmitted by disc from Kirk Winges, Shell, to Doug Hardesty, EPA Region 10 Contents: - ENVIRON Transmittal Letter - chukchi-missing-data-procedures - Pt-Lay - QAPPS
CCC-436	9/15/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Call at 3pm AK Time
CCC-437	9/15/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, RE: EPA Document (Attachment: EPA-450 3-77-026 Offshore O&G Emissions)
CCC-438	9/16/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: Information Regarding Methane Emissions (Attachments: Methane calc_20101022, Shell Arctic well gas volumes KC, methane emissions DS R3)
CCC-439	9/16/2011	Email from Susan Childs, Shell, to Doug Hardesty, EPA, RE: PDF File Issues
CCC-440	9/19/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Checking In
CCC-441	9/19/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Checking In
CCC-442	3/10/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: OCS Source Definition Update

November 14, 2011 Page 51 of 197

EPA Exhibit Number	Date	Document Description
CCC-443	3/8/2011	Email from Sara Glenn, Shell, to Doug Hardesty, EPA, RE: Invitation - Telecon-Shell & EPA
CCC-444	3/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Revised Workshop Agenda (Attachment: Shell-R10 Seattle Workshops Agenda Final)
CCC-445	3/29/2011	Email from Julie Vergeront, EPA, to Kirk Lilley, Kirk Lilley PLLC, RE: Meetings with Shell on 3/25 and 3/26
CCC-446	4/12/2011	Email From Alan Schuler, DEC, to Pauline Ruddy, Shell, RE: OLM olmgroup all question
CCC-447	4/12/2011	Email from Pauline Ruddy, Shell, to Alan Schuler, ADEC, RE: OLM olmgroup all question
CCC-448	4/19/2011	Modeler Email: - FW Shell Items from April 7th Modelers - Shell Items from April 7th Modelers Call - To EPA-04192011
CCC-449	4/21/2011	Email from Brad Broker, SLR Consulting, to Christopher Hall, EPA, RE: Kaktovik (Attachment: Barter Island Overview with Potential AQ Sites)
CCC-450	5/3/2011	Email from Brad Broker, SLR Consulting, to Christopher Hall, EPA, RE: Kaktovik sites
CCC-451	6/14/2011	506 Engine Replacement, Profiler QAPP and Engine replacement confirmation: - FwdProfilerQAP-Engine replacement - Email_RE ProfilerQAPP-Engine replacement
CCC-452	6/14/2011	517 Engine Clarification, Profiler QAPP and Engine replacement confirmation: - Fwd ProfilerQAPP-Engine replacement - Email_RE ProfilerQAPP-Engine replacement
CCC-453	8/22/2007	Email from Justin Greuel, EPA, to Carl Thiele, RE: Jack Up Rig Question

Return to Section CCC

Return to Table of Contents

November 14, 2011 Page 52 of 197

Section DDD: Supplemental Other Correspondence

	supplement	tai Other Correspondence
EPA		
Exhibit	ъ.	
Number	Date	Document Description
DDD-1	3/1/2010	ConocoPhillips Air Quality Permit - Early Information Sheet, Spring 2010
DDD-2	5/24/2010	Letter from Richard Albright, EPA, to Tribal Presidents, RE: ConocoPhillips Company Outer Continental Shelf Air Quality Permit Application for Oil and Gas Exploratory Drilling in the Chukchi Sea
DDD-3	7/1/2010	Email from Suzanne Skadowski, EPA, to Tyson Kade, VNF, RE: Question about the Beaufort Sea, Alaska Proposed Air Quality Permit
DDD-4	10/14/2010	Email from Tanya Sanerib, Crag, to Juliane Matthews, EPA, RE: Update to Shell's Beaufort Exploration Plan
DDD-5	4/12/2011	Email from Suzanne Skadowski, EPA, to Dan Springer, Fox News, RE: Offshore Drilling permits in Alaska
DDD-6	5/13/2011	Letter from Cindy Shogan, Alaska Wilderness League, to Lisa Jackson, EPA, RE: Prevention of Significant Deterioration Permits for Shell Oil Company's Arctic Ocean Offshore Exploration Drilling
DDD-7	5/16/2011	Email from Suzanne Skadowski, EPA, to Kristy Solomon, NSB, RE: EPA room rental June 16, 2001 public meeting
DDD-8	5/19/2011	Email from Suzanne Skadowski, EPA, to Thomasina Morris, NSBSD, RE: Facility Use (BHS) - EPA meetings with NSB, June 17
DDD-9	5/25/2011	Email from Suzanne Skadowski, EPA, to Craig George, NSB, RE: Invitation: Informational meetings on EPA air and water permits for oil and gas exploration, June 15-17, Kaktovik and Barrow
DDD-10	5/25/2011	Letter from Doug Hardesty, EPA, to North Slope Borough, RE: Invitation to attend informational meetings on EPA air and water permits for oil and gas exploration
DDD-11	5/25/2011	Email from Suzanne Skadowski, EPA, to Marietta Aiken, RE: Reserve NSB teleconference system for EPA informational meeting on air and water permits for oil and gas exploration, June 17, Barrow High School
DDD-12	5/25/2011	Letter from Doug Hardesty, EPA, to North Slope Borough, RE: Invitation to attend informational meetings on EPA air and water permits for oil and gas exploration

November 14, 2011 Page 53 of 197

EPA Exhibit Number	Date	Document Description
DDD-13	5/25/2011	Invitation to attend informational meetings on EPA air and water permits for oil and gas exploration – concurrence page
DDD-14	5/26/2011	Email from Suzanne Skadowski, EPA, to Tom Okleasik, NWABOR, RE: Invitation: Informational meetings on EPA air and water permits for oil and gas exploration, June 15-17, Kaktovik and Barrow
DDD-15	5/26/2011	Email from Suzanne Skadowski, EPA, to Emma Pokon, NSB, RE: Invitation: Informational meetings on EPA air and water permits for oil and gas exploration, June 15-17, Kaktovik and Barrow
DDD-16	6/1/2011	EPA Arctic Permits News - Air and Water Permits for Oil and Gas Exploration, Summer 2011
DDD-17	6/1/2011	EPA Arctic Permits Newsletter - Oil and gas exploration air and water permits, Summer 2011
DDD-18	6/1/2011	EPA Arctic Permits News - Air and Water Permits for Oil and Gas Exploration, Summer 2011
DDD-19	6/1/2011	Arctic Permits Newsletter: Oil and gas exploration air and water permits, Prepared by EPA
DDD-20	6/10/2011	Email from Suzanne Skadowski, EPA, to Craig George, NSB, RE: Reminder: U.S. Environmental Protection Agency (EPA) air & water oil/gas exploration permits meetings - Barrow June 16, 17
DDD-21	6/10/2011	Email from Suzanne Skadowski, EPA, to Cheryl Brower, NSB, RE: EPA meetings on air/water permits for oil/gas exploration, June 17, Barrow High School (NSB teleconference reserved)
DDD-22	6/10/2011	Email from Suzanne Skadowski, EPA, to Bernadette Neakok, RE: EPA meetings in Barrow June 16-17 on air and water permits for oil-gas exploration
DDD-23	6/13/2011	Email from Suzanne Skadowski, EPA, to Katarzyna Klimasinska, Bloomberg, RE: Urgent Re:[epa_arctic_permits] Air & Water Permits for Offsh
DDD-24	6/13/2011	Email from Suzanne Skadowski, EPA, to Rhoda Bennett, NSB, RE: EPA meetings on air/water permits for oil/gas exploration, June 17, Barrow High School (NSB teleconference reserved)
DDD-25	6/15/2011	Email from Emma Pokon, NSB, to Doug Hardesty, EPA, RE: OCS air permit comment periods

November 14, 2011 Page 54 of 197

EPA Exhibit		
Number	Date	Document Description
DDD-26	6/15/2011	Email from Emma Pokon, NSB, to George Olemaun, NSB, RE: Update: U.S. Environmental Protection Agency (EPA) air & water oil/gas exploration permits meetings - Barrow June 16, 17
DDD-27	6/15/2011	Email from Suzanne Skadowski, EPA, to Noe Texeira, NSB, RE: 2011 North Slope Borough Directory?
DDD-28	6/15/2011	Email from Suzanne Skadowski, EPA, to Emma Pokon, NSB, RE: EPA air & water oil/gas exploration permits meetings - Barrow June 16-17
DDD-29	6/15/2011	Email from Suzanne Skadowski, EPA, to Craig George, NSB, RE: Update: U.S. Environmental Protection Agency (EPA) air & water oil/gas exploration permits meetings - Barrow June 16, 17
DDD-30	6/15/2011	Email from Suzanne Skadowski, EPA, to Norajane Burns, RE: Meeting change: today's meeting with EPA air permits staff at 5:30-9:00pm
DDD-31	6/15/2011	Email from Harry Brower, AEWC, to Doug Hardesty, EPA, RE: Request for Region 10 to not hold overlapping written comment periods for OCS Air Permits
DDD-32	6/15/2011	Email from Emma Pokon, North Slope Borough, to Doug Hardesty, EPA, RE: OCS air permit comment periods (Attachment: 6.15.11 EPA – commenting periods for air permits)
DDD-33	6/16/2011	U.S. Environmental Protection Agency Public Meetings Flier, Barrow
DDD-34	6/16/2011	U.S. Environmental Protection Agency Public Meetings Flier, Barrow
DDD-35	6/16/2011	EPA Public Meeting Announcement, Inupiat Heritage Center
DDD-36	6/16/2011	Email from Suzanne Skadowski, EPA, to Jake Neher, KBRW, RE: Environmental Protection Agency in Barrow today and Friday for public meetings on air/water permits for arctic oil/gas exploration
DDD-37	6/16/2011	Stakeholders Meeting Sign-in: Air/Water Beaufort Sea & Chukchi Sea Oil & Gas Exploration, Inupiat Heritage Center
DDD-38	6/17/2011	Email from Suzanne Skadowski, EPA, to Craig George, NSB, RE: Reminder: EPA meeting 9:00am - 12:00pm Today on air/water permits for oil/gas exploration at Barrow High School

November 14, 2011 Page 55 of 197

EPA		
Exhibit Number	Date	Document Description
DDD-39	6/17/2011	Email from Suzanne Skadowski, EPA, to Tom Okleasik, NWABOR, RE: EPA meeting on air/water permits for oil/gas exploration at Barrow High School
DDD-40	6/17/2011	Email from Suzanne Skadowski, EPA, to Cheryl Brower, NSB, RE: Reminder: EPA meeting 9:00am - 12:00pm Today on air/water permits for oil/gas exploration at Barrow High School
DDD-41	6/17/2011	EPA Informational Meeting Sign-in: Air/Water Permits for Oil & Gas Exploration, Barrow High School
DDD-42	6/27/2011	Email from Kristy Solomon, NSB, to Suzanne Skadowski, EPA, RE: Heritage Center Facility Use Request (EPA public meetings August)
DDD-43	6/30/2011	Email from Suzanne Skadowski, EPA, to Barry Anderson, Alaska Newspapers, RE: EPA display ad public notice (Shell air permits) for July 4 or July 11, soonest possible
DDD-44	6/30/2011	Email from Suzanne Skadowski, EPA, to Shane Drew, Anchorage Daily News, RE: EPA public notice display ad (Shell air permits) for July 1 Anchorage Daily News
DDD-45	7/5/2011	Email from Suzanne Skadowski, EPA, to Nattinee Nipataruedi, ADEC, RE: Please post public notice to ADEC webpage
DDD-46	7/5/2011	Email from Suzanne Skadowski, EPA, to Scott Bailey, RE: EPA seeks public comments July 6 through August 5 on revised air quality permits for Shell Arctic oil exploration in the Beaufort Sea and the Chukchi Sea
DDD-47	7/8/2011	Email from Suzanne Skadowski, EPA, to Alessandra Carreon, ENVIRON, RE: Public Comments for Shell Discoverer Draft Air Permits
DDD-48	7/8/2011	Email from Suzanne Skadowski, EPA, to Cheryl Brower, NSB, RE: Reserve NSB teleconference for EPA public meeting, August 4, 5-9pm (and August 3)
DDD-49	7/8/2011	Email from Suzanne Skadowski, EPA, to Tanya Sanerib, RE: Request for further Region 10 Documents Pertaining to Revised OCS Air Permits for Shell
DDD-50	7/8/2011	Email from Suzanne Skadowski, EPA, to Alicia Burt, NSB, RE: Reserve NSB teleconference for EPA public meeting, August 4, 5- 9pm
DDD-51	7/12/2011	Email from Lolohea Tea, NSBSD, to Suzanne Skadowski, EPA, RE: Facility Use (BHS) August 3, for EPA public meeting, 4pm-9pm

November 14, 2011 Page 56 of 197

EPA Exhibit Number	Date	Document Description
DDD-52	7/12/2011	Email from Suzanne Skadowski, EPA, to Megan Williams, RE: Shell Discoverer Air Permits
DDD-53	7/14/2011	Email from Suzanne Skadowski, EPA, to Kristy Solomon, NSB, RE: Heritage Center Facility Use Request (EPA public meetings August 3-4 and August 22-23)
DDD-54	7/19/2011	Email from Suzanne Skadowski, EPA, to David Hobstetter, EarthJustice, RE: Modeling files
DDD-55	7/20/2011	Email from Suzanne Skadowski, EPA, to Lilly Miller, Ilisagvik College, RE: Dr. Tom Albert Conference Reservation
DDD-56	7/20/2011	Email from Suzanne Skadowski, EPA, to David Hobstetter, EarthJustice, RE: Modeling files per Earthjustice request for data maximum total 1-hour NO2
DDD-57	7/20/2011	Email from Suzanne Skadowski, EPA, to Lilly Miller, Ilisagvik College, RE: Ilisagvik College Reservation Request Form - Dr. Tom Albert Conference Room
DDD-58	7/21/2011	Letter from Richard Albright, EPA, to Harry Brower, AEWC, RE: Letter requesting that the U.S. Environmental Protection Agency not hold overlapping comment periods as planned for the Outer Continental Shelf exploratory drilling air projects
DDD-59	7/22/2011	Email from Andy Hawkins, EPA, to Alexander Fidis, EPA, RE: Modeling files per Earthjustice request for data maximum total 1-hour NO2
DDD-60	7/25/2011	Email from Suzanne Skadowski, EPA, to Nancy McGuire, Nome Nugget, RE: Permits in the Alaskan arctic
DDD-61	7/25/2011	Email from Suzanne Skadowski, EPA, to Cheryl Brower, NSB, RE: Reserve NSB teleconference for EPA public meetings in Barrow August 23-24 5-9pm?
DDD-62	7/25/2011	Email from Andy Hawkins, EPA, to Alexander Fidis, EPA, RE: Modeling files per Earthjustice request for data maximum total 1-hour NO2
DDD-63	7/26/2011	Email from Suzanne Skadowski, EPA, to Doreen Lampe, NSB, RE: EPA air permits comment periods - response and meeting invitation
DDD-64	7/26/2011	Email from Suzanne Skadowski, EPA, to Andy Mack, NSB, RE: EPA air permits comment periods - response and meeting invitation

November 14, 2011 Page 57 of 197

EPA Exhibit Number	Date	Document Description
DDD-65	7/27/2011	Email from Suzanne Skadowski, EPA, to June Elavgak, RE: EPA air permits comment periods response and meeting invitation
DDD-66	7/27/2011	Email from Suzanne Skadowski, EPA, to George Olemaun, NSB, RE: EPA air permits staff hosting meetings in Barrow August 3 and 4 - please announce on CB radio in all villages
DDD-67	7/27/2011	Email from Suzanne Skadowski, EPA, to Johnny Aiken, RE: EPA air quality permits for Shell and ConocoPhillips Arctic oil exploration
DDD-68	8/2/2011	Email from Suzanne Skadowski, EPA, to Andy Mack, NSB, RE: EPA air permits meeting invitation August 3 or August 4 in Barrow
DDD-69	8/2/2011	Email from Suzanne Skadowski, EPA, to Harry Brower, AEWC, RE: EPA air permits meeting invitation August 3 and 4
DDD-70	8/2/2011	Email from Suzanne Skadowski, EPA, to full_blooded_inupiaq, RE: Enviro. Protection Agency in Barrow Aug. 3-4 for public meetings on air permits for arctic oil/gas exploration
DDD-71	8/2/2011	Email from Suzanne Skadowski, EPA, to Cheryl Brower, NSB, RE: EPA air permits meetings in Barrow August 3 and 4 - information for teleconference centers, CB radio in all villages
DDD-72	8/2/2011	Email from Suzanne Skadowski, EPA, to Tom Okleasik, NWABOR, RE: EPA seeks public comments on new air quality permits for Shell and ConocoPhillips Arctic oil exploration
DDD-73	8/3/2011	Email from Suzanne Skadowski, EPA, to Johnny Aiken, RE: EPA air permits meeting August 3 with AEWC at 1:00 pm
DDD-74	8/3/2011	Email from Suzanne Skadowski, EPA, to Alicia Burt, NSB, RE: EPA air permits meetings in Barrow August 3 and 4
DDD-75	8/3/2011	Email from Suzanne Skadowski, EPA, to Cheryl Brower, NSB, RE: EPA air permits meetings in Barrow August 3 + 4 - Presentation attached for teleconference participants
DDD-76	8/3/2011	Email from Suzanne Skadowski, EPA, to Brent Newell, CRPE, RE: Shell and Conoco Chukchi sea permits
DDD-77	8/22/2011	Email from Suzanne Skadowski, EPA, to Dawn Reeves, IWP News, RE: Shell permit question

November 14, 2011 Page 58 of 197

EPA Exhibit Number	Date	Document Description
DDD-78	8/24/2011	Email from Lilly Miller, Ilisagvik College, to Suzanne Skadowski, EPA, RE: Invitation: EPA Public Meeting
DDD-79	8/26/2011	Email from Doreen Lampe, NSB, to Suzanne Skadowski, EPA, RE: Your testimony at EPA public hearing on Shell air permit
DDD-80	9/15/2011	Email from Catherine Villa, EPA, to Doreen Lampe, Barrow, RE: Recorded Testimony
DDD-81	Undated	U.S. EPA Informational Meetings Summary - Air & Water permits for Arctic Oil & Gas Exploration
DDD-82	Undated	EPA Fax Transmittal from Suzanne Skadowski, EPA, to NSB and Villages, RE: Please Post - Public Meetings reminder and update
DDD-83	9/15/2011	Email from Dave Newsad, SLR, to Doug Hardesty, EPA, RE: Mud Degassing Emissions Factor Info (Attachment: API- Table 5-17)

Return to Section DDD

Return to Table of Contents

November 14, 2011 Page 59 of 197

Section EEE: Supplemental Endangered Species Act/Essential Fish Habitat

EPA	2. Supplement	tal Endangered Species Act/Essential Fish Habitat
Exhibit		
Number	Date	Document Description
EEE-1	2/1/2003	Beaufort Sea Planning Area - Oil and Gas Lease Sales, 186, 195, and 202, Prepared by U.S. Department of the Interior
EEE-2	6/1/2006	Environmental Assessment - Final Rule to Authorize the Incidental Take of Small Numbers of Polar Bear (Ursus maritimus) and Pacific Walrus (Odobenus rosmarus divergens) During Oil and Gas Activities in the Beaufort Sea and Adjacent Coastal Alaska, Prepared by U.S. Fish and Wildlife Service
EEE-3	3/19/2008	Environmental Assessment - Final Rule to Authorize the Incidental Take of Small Numbers of Pacific Walruses (Odobenus rosmarus divergens) and Polar Bears (Ursus maritimus) During Oil and Gas Industry Exploration Activities in the Chukchi Sea, Prepared by U.S. Fish and Wildlife Service
EEE-4	7/1/2009	An Assessment of the Potential Effects of Oil and Gas Leasing Activities in the Beaufort Sea and Chukchi Sea Planning Areas, Prepared by the Minerals Management Service
EEE-5	10/1/2009	Environmental Assessment - Shell Offshore Inc., 2010 Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska, Prepared by Office of Leasing and Environment, Alaska OCS Region
EEE-6	10/20/2009	Federal Register, 74 FR 53683-53696; Endangered and Threatened Wildlife and Plants; Proposed Threatened and Not Warranted Status for Distinct Population Segments of the Spotted Seal, Proposed Rule
EEE-7	1/1/2010	Olfaction and Brain Size in the Bowhead Whale (Balaena mysticetus), Prepared by J. G. M. Thewissen, et al.
EEE-8	7/12/2010	Finding of No Significant Impact - Shell Exploration and Production, Ancillary Activity Notice, Prepared by Bureau of Offshore Energy Management, Regulation, and Enforcement, Alaska OCS Region
EEE-9	12/1/2010	Status Review of the Bearded Seal (Erignathus barbatus), Prepared by Michael F. Cameron, et al.
EEE-10	12/7/2010	Federal Register [75 FR 76086-76137], Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Polar Bear (Ursus maritimus) in the United States, Final Rule
EEE-11	12/10/2010	Federal Register [75 FR 77476-77495], Endangered and Threatened Species; Proposed Threatened Status for Subspecies of the Ringed Seal

November 14, 2011 Page 60 of 197

EPA Exhibit		
Number	Date	Document Description
EEE-12	12/10/2010	Federal Register [75 FR 77496-77515], Endangered and Threatened Species; Proposed Threatened and Not Warranted Status for Subspecies and Distinct Population Segments of the Bearded Seal, Proposed Seal
EEE-13	1/1/2011	Estimation of Southern Resident Killer Whale Exposure to Exhaust Emissions from Whale-Watching Vessels and Potential Adverse Health Effects and Toxicity Thresholds, Prepared by Cara L. Lachmuth, et al.
EEE-14	1/1/2011	Fact Sheet - Pacific Walrus (Odobenus rosmarus divergens), Prepared by U.S. Fish and Wildlife Service
EEE-15	1/1/2011	Status Review of the Pacific Walrus (Odobenus rosmarus divergens), Prepared by Joel Garlich-Miller, et al.
EEE-16	1/1/2011	Estimation of Southern Resident Killer Whale Exposure to Exhaust Emissions from Whale-Watching Vessels and Potential Adverse Health Effects and Toxicity Thresholds, Prepared by Cara L. Lachmuth, et al.
EEE-17	2/1/2011	Fact Sheet - Pacific Walrus and the Endangered Species Act Fact Sheet, Prepared by U.S. Fish and Wildlife Service
EEE-18	3/11/2011	Federal Register [76 FR 13454-13493], Marine Mammals; Incidental Take During Specified Activities, Proposed Rule
EEE-19	6/8/2011	Memorandum from Madonna Narvaez, EPA, to Shell Discoverer, Shell Kulluk, and ConocoPhillips OCS Permit Files, RE: Notes from Conference Call with FWS on June 1, 2011 re: ESA consultation on the OCS Air Permits
EEE-20	7/25/2011	Letter from Janis Hastings, EPA, to Fred King, Office of Leasing and Environment, Alaska OCS Region, RE: Confirmation of Informal Discussions Regarding the Clean Air Act
EEE-21	7/25/2011	Letter from Janis Hastings, EPA, to Ted Swem, USFWS, RE: Evaluation of the Potential Effects of Air Permits Issued Under the Clean Air Act
EEE-22	7/25/2011	Letter from Janis Hastings, EPA, to Kaja Brix, NMFS, RE: Evaluation of the Potential Effects of Air Permits Issued Under the Clean Air Act

November 14, 2011 Page 61 of 197

EPA Exhibit	Dete	December 1 December 1
Number	Date	Document Description
EEE-23	7/25/2011	Email from Madonna Narvaez, EPA, to Fred King, BOEMRE, RE: BOEMRE - ESA Evaluations for Shell Exploratory drilling operations in Beaufort/Chukchi Seas, ConocoPhillips exploratory drilling operations in Chukchi Sea (Attachments: ConocoPhillips Map of OCS Leases, Appendix A OCS Maps, BOEMRE Shell ltr 7_25_11, NMFS COP ltr 7_25_11, BOEMRE COP ltr 7_25_11, COP ESA Analysis 7 25 11, FWS COP ltr 7 25 11, Shell ESA Analysis 7_25_11, FWS Shell ltr 7_25_11)
EEE-24	8/1/2011	Environmental Assessment - Beaufort Sea Planning Area; Shell, 2012 Revised Outer Continental Shelf Lease Exploration Plan, Camden Bay, Beaufort Sea, Alaska, Prepared by Office of Leasing and Environment, Alaska OCS Region
EEE-25	8/2/2011	Letter from Ted Swem, U.S. Fish and Wildlife Service, to Janis Hastings, EPA, RE: ESA evaluation for Shell Beaufort Sea/Chukchi Sea, and ConocoPhillips Chukchi Sea air emissions permits
EEE-26	8/3/2011	Letter from Janis Hastings, EPA, to Kaja Brix, NMFS, RE: Clarification of Effect Finding for Bowhead Whales for Clean Air Act Permits to be issued to Shell Oil and ConocoPhillips in Beaufort and Chukchi Seas
EEE-27	8/3/2011	BOEMRE - Alaska OCS Region: Finding of No Significant Impact - Shell Offshore, Inc.; Revised Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska
EEE-28	8/4/2011	Letter from Jeff Walker, BOEMRE, to Susan Childs, EPA, RE: Shell's 2012 Revised Camden Bay Exploration Plan
EEE-29	9/7/2011	Letter from Kaja Brix, NMFS, to Janis Hastings, EPA, RE: Clean Air Act Permits to be Issued to Shell Oil and ConocoPhillips
EEE-30	Undated	Index Map 2 of 3 - Wainwright to Shishmaref, Final Designation of Critical Barrier Islands and Denning Habitat Maps
EEE-31	Undated	Ice Seals: Frequently Asked Questions, Prepared by NOAA
EEE-32	Undated	Pacific Walrus 12-month Finding - Questions and Answers, Prepared by the U.S. Fish and Wildlife Service
EEE-33	Undated	Collection of Maps RE: Beaufort and Chukchi Seas Habitat

November 14, 2011 Page 62 of 197

EPA Exhibit Number	Date	Document Description
EEE-34	Undated	Index Map 1 of 3 - U.S./Canada Border to Wainwright; Final Designation of Critical Barrier Islands and Denning Habitat Maps

Return to Section EEE

Return to Table of Contents

November 14, 2011 Page 63 of 197

Section FFF: Supplemental Environmental Justice

Section FFF	· Supplement	ai Environmentai Justice
EPA		
Exhibit	_	
Number	Date	Document Description
FFF-1	7/1/2004	Local Traditions and Subsistence: A Synopsis from Twenty-Five Years of Research by the State of Alaska, Prepared by Robert J. Wolfe, Alaska Department of Fish and Game
FFF-2	10/11/2007	Inupiat Health and Proposed Alaskan Oil Development: Results of the First Integrated Health Impact Assessment/Environmental Impact Statement for Proposed Oil Development on Alaska's North Slope, Prepared by Aaron Wernham, EcoHealth Journal Consortium
FFF-3	4/1/2009	Regional Health Profile - Arctic Slope, Prepared by Alaska Native Epidemiology Center
FFF-4	8/1/2009	Alaska Native Health Status Report, Prepared by Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium
FFF-5	6/4/2010	Literature Review of North Slope Marine Traditional Knowledge, Prepared by Stephen R. Braund & Associates
FFF-6	3/11/2011	Report of Traditional Knowledge Workshops - Point Lay, Barrow, Nuiqsut, and Kaktovik - Chukchi and Beaufort Seas National Pollutant Discharge Elimination System Exploration General Permits Reissuance, Prepared by Stephen R. Braund & Associates
FFF-7	Undated	Public Health and OCS Discharges: Review of Indirect Pathways, Prepared by Aaron Wernham, Northern Health Impact Resource Group
FFF-8	Undated	Supplemental Environmental Justice Analysis for Proposed Outer Continental Shelf PSD, Prepared by EPA
FFF-9	Undated	Talking Points - Environmental Justice Session at Alaska Forum on the Environment, Prepared by Price Leavitt, ICAS
FFF-10	Undated	EPA Region 10 Consultation Questionnaire, Prepared by EPA
D 4 C	otion EEE	Datum to Table of Contents

Return to Section FFF

Return to Table of Contents

November 14, 2011 Page 64 of 197

Section GGG: Supplemental Government-to-Government Consultation

EPA Exhibit Number	Date	Document Description
GGG-1	5/4/2011	EPA Policy on Consultation and Coordination with Indian Tribes, Prepared by EPA
GGG-2	6/7/2011	Letter from Richard Albright, EPA, to Tribal President, ICAS, RE: Shell Air Permit Applications for Oil and Gas Exploratory Drilling in the Beaufort Sea
GGG-3	6/7/2011	Letter from Richard Albright, EPA, to Tribal President, Kaktovik, RE: Shell Air Permit Applications for Oil and Gas Exploratory Drilling in the Beaufort Sea
GGG-4	6/7/2011	Letter from Richard Albright, EPA, to Tribal President, Nuiqsut, RE: Shell Air Permit Applications for Oil and Gas Exploratory Drilling in the Beaufort Sea

Return to Section GGG

Return to Table of Contents

November 14, 2011 Page 65 of 197

Section QQQ: 2011 Revised Draft Permits

	2. Zuli Kevis	ed Draft Permits
EPA		
Exhibit	Data	Dogument Description
Number	Date	Document Description
QQQ-1	7/1/2011	OCS Prevention of Significant Deterioration Permit to Construct, Beaufort Sea – Permit Number R10OCS/PSD-AK-2010-01, Draft Prepared by EPA
QQQ-2	7/1/2011	OCS Prevention of Significant Deterioration Permit to Construct, Chukchi Sea – Permit Number R10OCS/PSD-AK-09-01, Draft Prepared by EPA
QQQ-3	7/1/2011	Supplemental Statement of Basis for Proposed Outer Continental Shelf Prevention of Significant Deterioration Permits Noble Discoverer Drillship, Prepared by EPA
QQQ-4	7/1/2011	EPA Public Notice: Revised Draft Air Permits Proposed for Shell Oil and Gas Exploration Drilling in Beaufort Sea and Chukchi Sea, Alaska
QQQ-5	7/1/2011	EPA Press Release: EPA seeks public comments on revised air quality permits for Shell's Arctic oil exploration activities, Prepared by Suzanne Skadowski
QQQ-6	7/1/2011	EPA Press Release: EPA seeks public comments on revised air quality permits for Shell Arctic oil exploration activities, (Including Public Notice appearing in July 1 Anchorage Daily News), Prepared by Suzanne Skadowski
QQQ-7	7/1/2011	Email from Nattinee Nipataruedi, ADEC, to Suzanne Skadowski, EPA, RE: Please post public notice to ADEC webpage
QQQ-8	7/1/2011	Email from Claire Fishwick, ADEC, to Suzanne Skadowski, EPA, RE: Please post public notice to ADEC webpage
QQQ-9	7/1/2011	Shell Discoverer Public Notice - EPA Region 10 seeks public comment, Anchorage Daily News
QQQ-10	7/1/2011	Press Release: EPA seeks public comments on revised air quality permits for Shell Arctic oil exploration activities
QQQ-11	7/1/2011	Arctic Permits Mailing List, Shell Discoverer
QQQ-12	7/1/2011	Public Notice Advertisement - Shell Discoverer Revised Draft Air Permits

November 14, 2011 Page 66 of 197

EPA Exhibit		
Number	Date	Document Description
QQQ-13	7/5/2011	EPA Website: Alaska Outer Continental Shelf Permits – Notice of Comment Period and Public Hearing; 2011 Revised Draft PSD Air Permits for Shell Discoverer Drillship Chukchi Sea and Beaufort Sea
QQQ-14	7/5/2011	EPA Website: Shell Discoverer Air Permit, Beaufort Sea – Notice of Comment Period and Public Hearing
QQQ-15	7/5/2011	EPA Website: Shell Discoverer Air Permit, Chukchi Sea – Notice of Comment Period and Public Hearing
QQQ-16	7/5/2011	Alaska Department of Environmental Conservation Website: Online Public Notice – Revised Draft Air Permits Proposed for Shell Oil and Gas Exploration Drilling in Beaufort Sea and Chukchi Sea, Alaska, Public Comment July 6 to August 5, 2011
QQQ-17	7/11/2011	Shell Discoverer Public Notice - EPA Region 10 seeks public comment, Arctic Sounder
QQQ-18	8/3/2011	EPA Information Meeting Sign-in: Oil & Gas Exploration Air Permits - Inupiat Heritage Center, Barrow
QQQ-19	8/4/2011	EPA Informational Meeting Sign-in: Oil & Gas Exploration Air Permits, Inupiat Heritage Center, Barrow
QQQ-20	8/10/2011	EPA Website: Alaska Outer Continental Shelf Permits
QQQ-21	8/10/2011	EPA Website: Shell Discoverer Air Permit - Beaufort Sea
QQQ-22	8/10/2011	EPA Website: Shell Discoverer Air Permit - Chukchi Sea
QQQ-23	Undated	Shell 2011 Supplemental Permit Application for Discoverer Permits; Supplemental Application Table of Contents
QQQ-24	Undated	U.S. Environmental Protection Agency Public Review Package: 2011 Revised Draft PSD Air Permits for Shell Discoverer Drillship Chukchi Sea and Beaufort Sea – Public Comment Period July 6 to August 5, 2011

November 14, 2011 Page 67 of 197

EPA Exhibit		
Number	Date	Document Description
QQQ-25	Undated	U.S. Environmental Protection Agency Public Review Package: 2011 Revised Draft Shell Discoverer Air Permits for Public Information Repositories on the North Slope
QQQ-26	Undated	U.S. EPA Region 10 Public Review Package: 2011 Revised Draft PSD Air Permits for Shell Discoverer Drillship, Chukchi Sea and Beaufort Sea; Public Comment Period July 6 - August 5, 2011
QQQ-27	Undated	U.S. EPA Region 10 Public Review Package: 2011 Revised Draft PSD Air Permits for Shell Discoverer Drillship, Chukchi Sea and Beaufort Sea; Public Comment Period July 6 - August 5, 2011

Return to Section QQQ

Return to Table of Contents

November 14, 2011 Page 68 of 197

Section RRR: Public Comments on 2011 Revised Draft Permits

Section KKI	K: Public Con	ments on 2011 Revised Draft Permits
EPA Exhibit Number	Date	Document Description
RRR-1	7/13/2011	Public Comment Email from Bob Shears, to USEPA Region 10, RE: Comment re: Shell Discover Chukchi Sea Air Permit
RRR-2	7/27/2011	Public Comment Email from Jason Custer, Doug Hardesty, RE: Public Comment Re: Shell Air Permits for Beaufort and Chukchi Seas
RRR-3	7/28/2011	Public Comment Email from Pauline Ruddy, Shell, to USEPA Region 10, RE: Shell's Discoverer Air Permit Public Comment
RRR-4	8/1/2011	Public Comment Email from Doug Ward, to USEPA Region 10, RE: Alaska Outer Continental Shelf Permits
RRR-5	8/1/2011	Public Comment Email from Laurence P. Gebhardt, to USEPA Region 10, RE: Shell Discoverer Air Permits
RRR-6	8/1/2011	Public Comment Email from Hari-ji Baba, to USEPA Region 10, RE: Environment
RRR-7	8/1/2011	Public Comment Email from Charles Schmalz, to USEPA Region 10, RE: Oil Drilling Ships re. America's Arctic Ocean
RRR-8	8/1/2011	Public Comment Email from William McMullin, to USEPA Region 10, RE: ANWR
RRR-9	8/1/2011	Public Comment Email from Jac Maz, to USEPS Region 10, RE: Don't Allow Oil Drilling Ships To Pollute America 's Arctic Ocean
RRR-10	8/2/2011	Letter from Leona Grage to EPA Region 10, RE: Shell Discoverer Air Permits
RRR-11	8/3/2011	Public Comment Email from Doug Ward, to USEPA Region 10, RE: 2011 Revised Draft PSD Air Permits for Shell and ConocoPhillips drilling in the Chukchi Sea and Beaufort Seas
RRR-12	8/3/2011	Public Comment Email from Mike Judson, to USEPA Region 10, RE: 2011 Revised Draft PSD Air Permits for Shell and ConocoPhillips drilling in the Chukchi Sea and Beaufort Seas
RRR-13	8/3/2011	Public Comment Email from Jim Pinckney, to USEPA Region 10, RE: oil and gas permits

November 14, 2011 Page 69 of 197

EPA		
Exhibit Number	Date	Document Description
RRR-14	8/3/2011	Public Comment Email from Randy Johnson, to USEPA Region 10, RE: 2011 Revised Draft PSD Air Permits for Shell and ConocoPhillips drilling in the Chukchi Sea and Beaufort Seas
RRR-15	8/3/2011	Public Comment Email from Al Turner, to USEPA Region 10, RE: Exploring in Alaska's OCS
RRR-16	8/3/2011	Public Comment Email from Don Bewley, to USEPA Region 10, RE: Support for Permit
RRR-17	8/3/2011	Public Comment Email from Ryckman, Mary Kay, DNR, to USEPA Region 10, RE: Alaska Dept of Natural Resources Comments (Attachment: AK DNR Comments PSD Air Permits Shell Discoverer)
RRR-18	8/4/2011	EPA Public Hearing - Shell Discoverer Revised PSD Air Permits for Oil and Gas Exploration in Beaufort Sea and Chukchi Sea, Barrow, Alaska
RRR-19	8/4/2011	Price Leavitt (ICAS) Testimony - Shell Discoverer Air Permits for the Beaufort & Chuckchi Seas, Barrow, Alaska
RRR-20	8/4/2011	Shell Disco Handwritten Notes of August 4, 2011 Public Hearing, Barrow, Alaska, Doug Hardesty
RRR-21	8/4/2011	Shell Disco Handwritten Notes of August 4, 2011 Public Hearing, Barrow, Alaska, Rick Albright
RRR-22	8/4/2011	EPA Air Permits Public Hearing Sign-in: Shell Discoverer Oil & Gas Exploration
RRR-23	8/5/2011	Public Comment Email from Brent Newell, to USEPA Region 10, RE: comments on Shell Discoverer permit - Chukchi Sea (Attachment: 8.5.11 Kivalina IRA Council comments)
RRR-24	8/5/2011	Public Comment Email from Daniel J. Inulak Lum, to USEPA Region 10, RE: Discoverer Drill Rig Air Permits (from Eskimo Whaler <eskimo.whaler@yahoo.com>)</eskimo.whaler@yahoo.com>
RRR-25	8/5/2011	Public Comment Email from Carole Holley, to USEPA Region 10, RE: Revised Draft Air Permits for Shell's Proposed Oil and Gas Exploration(Attachment: PE EPA Air Permits letter 8-5-11)
RRR-26	8/5/2011	Public Comment Email from Kate Williams, to USEPA Region 10, RE: AOGA CMTS 2011 PSD air permits Shell Discoverer Beaufort/Chukchi Seas (Attachment: 08052011 AOGA CMTS Shell Discoverer Air Permits)

November 14, 2011 Page 70 of 197

EPA		
Exhibit	.	
Number	Date	Document Description
RRR-27	8/5/2011	Public Comment Email from Jeff Turner, to USEPA Region 10, RE: public comment - Shell Discoverer Air Permits for Chukchi and Beaufort Seas (Attachment: EPA Letter - Shell Air Permits 08052011)
RRR-28	8/5/2011	Public Comment Email from John Chase, to USEPA Region 10, RE: NAB Comments: EPA Revised Air Quality Permits for Shell_August 2011 (Attachment: EPA_Air Quality permit_Shell_August2011)
RRR-29	8/5/2011	Public Comment Email from Tiffany Nicolos, to USEPA Region 10, RE: Comments - North Slope Borough (Attachment: NSB AEWC ICAS comments re. Shell Air Permits (8.5.11))
RRR-30	8/5/2011	Public Comment Email from Sarah Saunders, to USEPA Region 10, RE: Comments on Shell's Revised Draft Air Permits, part 1 (Attachments: AWL, et al. Comment to EPA on Draft Shell Supplemental PSD Permits and AWL, et al Comments, Attachment part 1)
RRR-31	8/5/2011	Public Comment Email from Sarah Saunders, to USEPA Region 10, RE: Comments on Shell's Revised Draft Air Permits, part 2 (Attachment: AWL, et al Comments, Attachment part 2)
RRR-32	8/5/2011	Public Comment Email from Sarah Saunders, to USEPA Region 10, RE: Comments on Shell's Revised Draft Air Permits, part 3 (Attachment: AWL, et al Comments, Attachment part 3)
RRR-33	8/5/2011	Public Comment Email from Sarah Saunders, to USEPA Region 10, RE: Comments on Shell's Revised Draft Air Permits, part 4 (Attachment: AWL, et al Comments, Attachment part 4)
RRR-34	8/5/2011	Public Comment Email from Sarah Saunders, to USEPA Region 10, RE: Comments on Shell's Revised Draft Air Permits, part 5 (Attachment: AWL, et al Comments, Attachment part 5)
RRR-35	8/5/2011	Public Comment Email from Sarah Saunders, to USEPA Region 10, RE: Comments on Shell's Revised Draft Air Permits, part 6 (Attachment: AWL, et al Comments, Attachment part 6)
RRR-36	8/5/2011	Public Comment Email from Sarah Saunders, to USEPA Region 10, RE: Comments on Shell's Revised Draft Air Permits, part 7 (Attachment: AWL, et al Comments, Attachment part 7)
RRR-37	8/5/2011	Letter from Gale Wallach to EPA Region 10, RE: Shell Discoverer Air Permits
RRR-38	8/5/2011	Letter from Leah Donahey, Alaska Wilderness League, to EPA Region 10, RE: 2011 Revised Draft PSD Air Permits for Shell Discoverer Drillship Chukchi Sea and Beaufort Sea

November 14, 2011 Page 71 of 197

EPA Exhibit Number	Date	Document Description
RRR-39	8/5/2011	Compilation of 14,605 identical or similar comments received between 7/27/2011 and 8/5/2011, RE: Don't Allow Oil Drilling Ships to Pollute America's Arctic Ocean
RRR-40	Undated	Notice regarding comments of general opposition received by EPA Region 10

Return to Section RRR

Return to Table of Contents

November 14, 2011 Page 72 of 197

Section SSS: Final 2011 Revised Permits

EPA Exhibit Number	Date	Document Description
SSS-1	9/19/2011	Email from Suzanne Skadowski, EPA, to Kate Williams, AOGA, RE: EPA Notice of Final Air Permits Issued to Shell (Discoverer) for oil-gas exploration, Beaufort and Chukchi Seas, Alaska
SSS-2	9/19/2011	Shell Discoverer - Beaufort, Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct - Permit Number: R10OCS/PSD-AK-2010-01
SSS-3	9/19/2011	Shell Discoverer - Chukchi, Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct - Permit Number: R10OCS/PSD-AK-09-01
SSS-4	9/19/2011	Supplemental Response to Comments for Outer Continental Shelf Prevention of Significant Deterioration Permits - Noble Discoverer Drillship, Shell

Return to Section SSS

Return to Table of Contents

November 14, 2011 Page 73 of 197

Documents in the Administrative Record as of June 4, 2010⁵

Section A: Permit Application Documents and Supplemental Application Materials

EPA Exhibit		
Number	Date	Document Description
A-1	11/12/2008	Frontier Discoverer Alaska Outer Continental Shelf Exploration Drilling Program, Air Quality Impact Modeling Protocol
A-2	12/11/2008	Letter from Susan Childs, Shell Offshore, Inc. to Richard Albright, EPA regarding Preconstruction Permit Application for Frontier Discoverer Drill Vessel in Chukchi Sea, beyond the 25-mile Alaska Seaward Boundary
A-3	1/15/2009	E-mail from Tim Martin, Air Sciences, Inc. to Herman Wong, EPA regarding the Discoverer Chukchi Source Contribution
A-4	1/26/2009	E-mail from Tim Martin, Air Sciences, Inc. to Herman Wong, EPA regarding the Shell Chukchi Icebreaker Characterization
A-5	2/23/2009	Shell Offshore Inc. Outer Continental Shelf Pre-construction Air Permit Revised Application, Frontier Discover Chukchi Sea – Cover Letter
A-6	2/23/2009	Shell Offshore Inc. Outer Continental Shelf Pre-construction Air Permit Revised Application, Frontier Discover Chukchi Sea – Revised Application
A-7	2/24/2009	Shell Offshore Inc. Outer Continental Shelf Pre-construction Air Permit Revised Application, Frontier Discover Chukchi Sea – Appendices A-G
A-8	3/20/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair and Herman Wong, EPA regarding Chukchi Sea Leases
A-9	4/14/2009	E-mail from Tim Martin, Air Sciences, Inc. to Herman Wong, EPA regarding the Impact Modeling for Warehouse Emissions – Wainwright or Barrow. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-9)
A-10	4/23/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair, EPA regarding Conference Call on Icebreakers

November 14, 2011 Page 74 of 197

⁵ These documents are identified in the Certified Index to the Administrative Record filed by Region 10 on June 4, 2010 in OCS Appeal Nos. 10-01 through 10-04.

EPA Exhibit		
Number	Date	Document Description
A-11	4/27/2009	E-mail from Tim Martin, Air Sciences, Inc. to Rodger Steen regarding Volume Sources (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-11)
A-12	5/5/2009	E-mail from Rodger Steen, Air Sciences, Inc. regarding Updated Emissions Discoverer El with 84-day well site limit removed & updated BACT for FD20
A-13	5/11/2009	E-mail from Thomas Damiana, AECOM to Herman Wong, EPA regarding Wainwright Audit Reports
A-14	5/14/2009	E-mail from Rodger Steen, Air Sciences to Sabrina Pryor regarding Proposed Alternative Handling of Ice Management Fleet, Supply Ship, Nanuq
A-15	5/18/2009	Shell Offshore Inc. – Response to March 12, 2009 2 nd EPA Letter of Incompleteness – Revised Preconstruction Permit Application for Frontier Discoverer Drillship in Chukchi Sea, Alaska, beyond 25-mile Alaska Seaward Boundary
A-16	5/19/2009	E-mail from Thomas Damiana, AECOM to Herman Wong, EPA regarding Wainwright March 2009 Summary Report
A-17	5/20/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair, EPA regarding Hypothetical maximum Ice Management Vessel and joining of ICE engine limits
A-18	5/29/2009	Letter from Susan Childs, Shell to Janis Hastings, EPA regarding Shell Offshore Inc. – Updated Responses to March 12, 2009, 2 nd EPA Letter of Incompleteness
A-19	6/1/2009	Shell Offshore Inc. – Supplemental Response – Additional Impact Analysis
A-20	6/5/2009	E-mail from Kirk Winges, ENVIRON to Tim Martin, Air Sciences, Inc. regarding Shell Chukchi and Beaufort Sea PSD Applications
A-21	6/5/2009a	E-mail from Rodger Steen, Air Sciences regarding Updated BACT Analysis for Volatile Organic Compounds sources
A-22	6/9/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding Ice Removal – Disco Bow

November 14, 2011 Page 75 of 197

EPA Exhibit	D. (
Number	Date	Document Description
A-23	6/16/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair, EPA regarding Information on Non-Criteria Regulated Air Pollutants with Spreadsheet titled "Discoverer Emissions Chukchi OCS_061509.xls"
A-24	6/16/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair and Herman Wong, EPA regarding Shell Discoverer non-criteria pollutants with attachment titled "Resp to EPA Disco Non-criteria 06162009.pdf"
A-25	6/19/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair and Paul Boys, EPA regarding Discoverer Chukchi Sea - Criteria Emissions in your requested format and Compliance Monitoring Proposal
A-26	6/23/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding Follow-Up Regarding Anchor Handling and Bow Emissions
A-27	6/23/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding PM2.5 Anchor Handling. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-27)
A-28	6/23/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding Modeling Files (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-28)
A-29	6/23/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA Regarding PM10 Discoverer Bow (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-29)
A-30	6/23/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding PM2.5 Discoverer Bow (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-30)
A-31	6/24/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair, EPA regarding Information on Resupply Ship
A-32	6/26/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding Request for Information on Discoverer +/-15 degree Re-Orientation
A-33	6/30/2009	E-mail from Kirk Winges, ENVIRON to Pat Nair, EPA regarding Anchor Setting Emissions
A-34	7/6/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Herman Wong, EPA regarding Associated Emissions

November 14, 2011 Page 76 of 197

EPA		
Exhibit Number	Date	Document Description
A-35	7/6/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair, EPA regarding Title VI Potential to Emit
A-36	7/12/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair, EPA regarding Questions on D399 Anticipated Compliance Conditions
A-37	7/13/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding Ice Removal – Discoverer Bow
A-38	7/15/2009	E-mail from Kirk Winges, ENVIRON regarding Anchor Setting Emissions for PM 2.5 (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-38)
A-39	7/15/2009	E-mail from Kirk Winges, ENVIRON regarding Anchor Setting Emissions for PM 10 (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-39)
A-40	7/16/2009	E-mail from Thomas Damiana, AECOM to Herman Wong, EPA regarding Wainwright Near-Term Monitoring Program May 2009 Data Summary
A-41	7/16/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA regarding Bow Washing Emissions for PM 2.5 and PM 10 (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-41)
A-42	7/17/2009	E-mail from Tim Martin, Air Sciences, Inc. to Herman Wong, EPA regarding Bow Washing Emissions for PM 2.5 and PM 10
A-43	7/17/2009	E-mail from Tim Martin, Air Sciences, Inc. to Herman Wong, EPA regarding Background Concentrations (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-43)
A-44	8/10/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Janis Hastings, EPA regarding Responses to draft disco/Chukchi permit – the largest issues
A-45	8/12/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA Regarding Example Model Runs (attachments not delivered)
A-46	8/12/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA Regarding Request for a Modification on the Discoverer Location Restrictions

November 14, 2011 Page 77 of 197

EPA Exhibit	_	
Number	Date	Document Description
A-47	8/12/2009	E-mail from Susan Childs, Shell to Julie Vergeront, EPA regarding SGOMI and signing authority
A-48	8/13/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA Regarding Example Model Runs. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-48)
A-49	8/13/2009	E-mail from Kirk Winges, ENVIRON to Dave Bray, EPA regarding Geometry
A-50	8/13/2009	E-mail from Kirk Winges, ENVIRON to Herman Wong, EPA Regarding Example Model Runs
A-51	9/17/2009	Letter from Susan Childs, Shell to, EPA re: Shell Gulf of Mexico Inc. Comments on August 2009 Proposed Discoverer/Chukchi OCS/PSD Permit to Construct. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-51)
A-52	10/8/2009	Letter from Susan Childs, Shell, to EPA, re: Shell Gulf of Mexico Inc. Comments on the August 2009 Proposed Discoverer/ Chukchi OCS/PSD Permit to Construct (permit tracked to show Shell's requested changes)
A-53	10/19/2009	E-mail and attachments from Rodger Steen, Air Science, Inc. to Pat Nair, EPA regarding Clarifications needed on Icebreaker #2
A-54	10/20/2009	Email from Kirk Lilley with letter from Susan Childs, Shell regarding Shell Gulf of Mexico Supplemental Additional Comments on the August 2009 Proposed Discoverer/Chucky OCS/PSD Permit to Construct
A-55	10/20/2009	Rodger G. Steen e-mail and attached letter from Shell Gulf of Mexico, Inc. Re: Shell Gulf of Mexico, Inc. Supplemental Comments on the August 2009 Proposed Discover/Chukchi OCS/SD Permit to Construct
A-56	11/13/2009	Document from Shell provided to EPA Re: Conceptual Plan: Potential Re-Proposal of Shell Chukchi Draft PSD Permit
A-57	11/18/2009	E-mail from Kirk Winges, ENVIRON regarding Kilabuck
A-58	11/19/2009	E-mail from Kirk Winges, ENVIRON to Pat Nair, EPA regarding Scale Idea

November 14, 2011 Page 78 of 197

EPA Exhibit		
Number	Date	Document Description
A-59	11/23/2009	Letter from Susan Childs, Shell to Janis Hastings, EPA, re: Supplemental Application Support Materials in Response to November 12, 2009 Meeting
A-60	11/25/2009	E-mail from Kirk Winges, ENVIRON and attachments regarding Supplemental BACT analysis and Small Engine Stack Testing
A-61	12/2/2009	ENVIRON Revised CO Analysis.(Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-61)
A-62	12/7/2009	Wainwright 4th Monitoring Qtr Summary. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: A – Permit Application\A-62)
A-63	12/9/2009	Letter from Susan Childs, Shell to Rick Albright, EPA Regarding Shell Gulf of Mexico Inc. Supplement to Application for Discover/Chukchi OCS/PSD Permit
A-64	12/10/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Pat Nair regarding Info on new engines
A-65	12/11/2009	E-mail from Kirk Winges, ENVIRON to Paul Boys, EPA regarding edited BACT with attachment, "Diesel Engine Best Available Control Technology Analysis, Frontier Discoverer Drill Ship"
A-66	12/13/2009	Letter from Susan Childs, Shell to Rick Albright, EPA Regarding Shell Gulf of Mexico Inc. Supplement to Application for Discoverer/Chukchi OCS/PSD Permit with Attachments A-I
A-67	12/16/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Dave Bray, EPA regarding Wainwright PM2.5 Analysis with Attachments (Wainwright Precipitation and Wind Statistics
A-68	12/18/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Dave Bray, EPA regarding Discoverer Incinerator Emissions
A-69	12/18/2009	E-mail from Rodger Steen, Air Sciences, Inc. to Dave Bray, EPA regarding PM 2.5 & PM 10 Wainwright Statistics
A-70	12/22/2009	E-mail from Eric Hansen, ENVIRON to Paul Boys, EPA regarding Supplemental BACT analyses for CO emissions from MLC and logging winch engines (with attachment: Memorandum from ENVIRON regarding Shell Chukchi Sea PSD Permit and data) Return to Table of Contents

Return to Section A

Return to Table of Contents

November 14, 2011 Page 79 of 197

Section AA: Permit Application Documents and Supplemental Application Materials (cont.)

EPA Exhibit Number	Date	Document Title
AA-1	1/18/10	Letter from Susan Childs, Shell Offshore, Inc., to Richard Albright, EPA, re: Permit Application (Revised) for Frontier Discoverer Drill Vessel in Beaufort Sea Att. 1: Outer Continental Shelf Pre-Construction Air Permit Application and Appendices

Return to Section AA

Return to Table of Contents

November 14, 2011 Page 80 of 197

Section B: Guidance, Background Information, and Technical Analysis

	ruidalice, Daci	kground Information, and Technical Analysis
EPA Exhibit Number	Date	Document Description
B-1	1970	Workbook of Atmospheric Dispersion Estimates, No. AP-26 (1970)
B-2	06/1977	U.S. EPA, Atmospheric Emissions From Offshore Oil and Gas Development and Production. EPA-450/3-77-026. Office of Air Quality Planning and Standards. RTP, North Carolina.
В-3	10/1977	Guidelines for Air Quality Maintenance Planning and Analysis, Volume 10 (Revised) – Procedures for Evaluating Air Quality Impact of New Stationary Sources
B-4	05/1978	Auer, Jr., A.H. Correlation of Land Use and Cover with Meteorological Anomalies, Journal of Applied Meteorology (pp. 636-643).
B-5	9/28/1982	Memorandum from Kathleen M. Bennett to Assistant Administrator for Air, Noise and Radiation Regional Administrators, Regions I-X, Re: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions
B-6	4/9/1985	U.S. Patent "Quick Disconnect/Connect Mooring Method and Apparatus for Turret Moored Drillship." Patent Number: 4,509,448.
B-7	5/1/1987	U.S. EPA. Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD). EPA-450/4-87-007. Office of Air Quality Planning and Standards, RTP, NC.
B-8	11/19/1987	Memorandum from Gary McClutchen, EPA, Michael Trutna, EPA, to J. David Sullivan, EPA, Re: Request for Determination on Best Available Control Technology (BACT) Issues – Ogden Martin Tulsa Municipal Waste Incinerator Facility
B-9	1989	Report of the Senate Committee on Environment and Public Works on S. 1630
B-10	10/1990	U.S. EPA. Draft New Source Review Workshop Manual, Prevention of Significant Deterioration and Nonattainment Area Permitting. http://www.epa.gov/ttn/nsr/gen/wkshpman.pdf
B-11	12/5/1991	Outer Continental Shelf Air Regulations, Proposed Rule, 56 Fed. Reg. 63774
B-12	7/22/1992	Memorandum to Docket A-90-33; Docketing of detailed Responses to Comments on the Part of 70 Operating Permit Regulations

November 14, 2011 Page 81 of 197

EPA Exhibit	_	
Number	Date	Document Description
B-13	9/4/1992	Outer Continental Shelf Air Regulations, Final Rule, 57 Fed. Reg. 40792
B-14	10/1992	U.S. EPA. Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised, EPA-454/R-92-019. Office of Air Quality Planning and Standards, RTP, NC.
B-15	1/28/1993	Memorandum from John B. Rasnic, Director, Stationary Source Compliance Division Office of Air Quality Planning and Standards to Linda M. Murphy, Director, Air, Pesticides and Toxics Management Division Region 1, Re: Automatic or Blanket Exemptions for Excess Emissions During Startup, and Shutdowns Under PSD
B-16	09/1995	U.S. EPA. User's Guide for the Industrial Source Complex (ISC3) Dispersion Models, Volume I, User Instructions, EPA-454/B-95- 003a. Office of Air Quality Planning and Standards, Emissions Monitoring and Analysis Division, RTP, NC.
B-17	10/1996	AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Area Sources, Chapter 1, Section 1.3, Chapter 2, Section 2.1 and 2.2, and Chapter 3, Sections 3.3 and 3.4. See also http://www.epa.gov/ttn/chief/ap42/index.html for the Background Information and Related Information for these Sections
B-18	8/14/1997	Conditional Test Method (CTM-027) Procedures for Collection and Analysis of Ammonia in Stationary Sources
B-19	2/24/1998	Letter from John S. Seitz, EPA, to Gustave Von Bodungen, Louisiana Department of Environmental Quality.
B-20	3/19/1998	Letter from John S. Seitz, EPA, to Kevin Tubbs, American Standard.
B-21	05/1998	U.S. EPA. Locating and Estimating Air Emissions from Sources of Lead and Lead Compounds, EPA-454/R-98-006. May 1998.
B-22	8/1/1998	Regulatory Announcement, New Emission Standards for Nonroad Diesel Engines, EPA420-F-98-034
B-23	11/17/98	Memorandum from Eric Schaeffer, Director, Office of Regulatory Enforcement, to Addressees, Re: Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements

November 14, 2011 Page 82 of 197

EPA Exhibit Number	Date	Document Description
B-24	9/20/1999	Memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance; Robert Perciasepe, Assistant administrator for Air and Radiation to Regional Administrators, Regions I-X, Re: State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown
B-25	01/2000	Air Quality Construction Permit, ARCO Alaska Inc. and Andarko Petroleum Corp, – ADEC Permit Number 9973-AC017
B-26	04/2001	Clean Air Act Stationary Source Compliance Monitoring Strategy April 2001
B-27	2/13/2002	Application of the thermal DeNOx process to diesel engine DeNOx: an experimental and kinetic modeling study, C. M. Nam and B. M. Gibbs, Department of Fuel and Energy, The University of Leeds, Leeds, UK
B-28	4/19/2002	Letter from Stephen Greig at Venoco Inc. to Eric Peterson, Santa Barbara County APCD and Cy Oggins, CA State Lands Commission. Subject: Platform Holly Drilling Mud Degasser
B-29	05/2002	U.S. EPA. Health Assessment Document for Diesel Engine Exhaust, EPA/600/8-90/057F. May 2002.
B-30	06/2003	U.S. EPA. AERMOD: Latest Features and Evaluation Results, EPA-454/R-03-003. Office of Air Quality Planning and Standards, Emissions Monitoring and Analysis Division, RTP, NC.
B-31	06/2003	Stationary Diesel Generators in the Northeast. An Initial Assessment of the Regional Population. Control Technology Options and Air Quality Policy Issues.
B-32	4/21/2004	U.S. EPA.2004b. User's Guide to the Building Profile Input Program, EPA-454/R-93-038. Office of Air Quality Planning and Standards, RTP, NC.
B-33	8/26/2004	U.S. EPA.2004a. ISC3 with PRIME Building Downwash – ISC3P, Version 04269. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina (RTP, NC).
B-34	11/23/2004	Verification of Ship Emission Estimates with Monitoring Measurements to Improve Inventory and Modeling, Final Report. James J. Corbett P.E. Ph.D.
B-35	12/2004	Economic Study of the Burger Gas Discovery, Chukchi Shelf, Northwest Alaska

November 14, 2011 Page 83 of 197

EPA Exhibit Number	Date	Document Description
B-36	8/8/2005	Prevention of Significant Deterioration Permit to Construct R10PSD-OR-05-01, Diamond Wanapa I.L.P.
B-37	11/9/2005	Revision to the Guideline on Air Quality Models Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions; Final Rule, 70 Fed. Reg. 68218 (11/09/05)
B-38	11/18/2005	Western Regional Air Partnership, Offroad Diesel Retrofit Guidance Document, Volume 2, Retrofit Technologies, Applications and Experience, Emission Advantage, LLC
B-39	2007	Manual for CAT C15 For Fleet and Line Haul Performance
B-40	3/30/2007	Air Quality Control Minor Permit No. R10OCS-AK-07-02, Approval to Construct, Shell Offshore, Inc. Frontier Discoverer Drilling Unit
B-41	3/30/2007	Air Quality Control Minor Permit No. R10OCS-AK-07-12, Approval to Construct, Shell Offshore, Inc. Kulluk Drilling Unit
B-42	05/2007	EPA 420-R-07-005, "Diesel Retrofit Technology: An Analysis of the Cost-Effectiveness of Reducing Particulate Matter and Nitrogen Oxides Emissions from Heavy-Duty Nonroad Diesel Engines Through Retrofit"
B-43	8/30/2007	Prevention of Significant Deterioration Permit to Construct, Deseret Power Electric Cooperative Bonanza Power Plant – Utah, Response to Public Comments
B-44	9/28/2007	EPA Office of Transportation and Air Quality, Clean Construction USA, Retrofit Strategies, http://www.epa.gov/otag/diesel/construction/strategies.htm
B-45	10/9/2007	Letter from Steven C. Riva, Region 2 EPA, To Leon Sedefian, Air Pollution Meteorologist, New York State Department of Environmental Conservation, Re: Ambient Air for the Offshore LNG Broadwater Project
B-46	01/2008	Diesel Engine Retrofits in the Construction Industry: A How To Guide, Massachusetts Department of Environmental Protection
B-47	2/18/2008	Effects of Envirofuels DFC on a Land Drilling Rig, Envirofuels, Houston, Texas

November 14, 2011 Page 84 of 197

EPA		
Exhibit Number	Date	Document Description
B-48	5/14/2008	BACT Cost Effectiveness Threshold- San Joaquin Valley Unified Air Pollution Control District, Final Staff Report: Update to BACT Cost Effectiveness Thresholds
B-49	6/12/2008	Memorandum from Dan Meyer to File Regarding Volatile Organic Compound Emissions Associated with Shallow Gas Diversions and Drilling Mud Returns – Kulluk Drilling Rig
B-50	6/12/2008	Response to Comments, Kulluk Minor Source Statement of Basis, Air Quality Control Minor Permit No. R10OCS-AK-07-012, Approval to Construct, Shell Offshore, Inc. Kulluk Drilling Unit (June 18, 2008)
B-51	6/18/2008	Alaska OCS Air Quality Control Minor Permit, Approval to Construction, Kulluk Drilling Unit, EPA Region 10 Permit No. R10OCS-AK-07-01
B-52	8/20/2008	ADEC Standard Permit Condition III – Excess Emissions and Permit Deviation Reports, Permit Conditions for Air Quality Permits, Adopted by reference in 18 AAC 50.346
B-53	8/20/2008	ADEC Standard Permit Condition VII –Operating Reports, Permit Conditions for Air Quality Permits, Adopted by reference in 18 AAC 50.346
B-54	12/18/2008	Memorandum from EPA Administrator Stephen L. Johnson to Regional Administrators re: EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program
B-55	12/31/2008	Federal Register Notice re: EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program, 73 Federal Register 80300
B-56	2009	Clean Air Systems, The Clean Air Permit™ Filter System Brochure dated 2009
B-57	2009	Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and engine Oil by Ultraviolet Fluorescence.
B-58	2009	Data: ISC3P Model Setup
B-59	2009	Data: SB.data O. SRN
B-60	2/17/2009	Letter from EPA Administrator Lisa P. Jackson to David Bookbinder, Sierra Club, re: Amended Petition for Reconsideration of December 18, 2008 Johnson Memo

November 14, 2011 Page 85 of 197

EPA Exhibit Number	Date	Dogument Description
Nullibel	Date	Document Description Emission Standards: USA Normand Dissal Engines
B-61	4/1/2009	Emission Standards: USA Nonroad Diesel Engines, http://www.dieselnet.com/standards/us/nonroad.php
B-62	4/1/2009	Emission Standards: USA Stationary Diesel Engines, http://www.dieselnet.com/standards/us/stationary.php
B-63	4/10/2009	ASTM-D975-09 Standard Specification for Diesel Fuels Oils,
B-64	4/15/2009	Other Test Method - 27 - Determination of PM10 and PM 2.5 Emission from Stationary Sources
B-65	4/15/2009	Other Test Method 28 - Dry Impinger Method for Determining Condensate Particulate Emissions from Stationary Sources
B-66	4/17/2009	Mitsubishi Power Systems Selective Catalytic Removal System, http://www.mpshq.com/products_scr.htm
B-67	4/17/2009	Institute of Clean Air Companies, NOx Control Technologies, Selective Catalytic Reduction (SCR),
B-68	4/24/2009	Federal Register Notice re: Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases, 78 Federal Register 18886
B-69	4/24/2009	Public Notice, EPA Terminates Minor Source Air Permitting Activity for Shell Kulluk
B-70	6/12/2009	EPA Office of Transportation and Air Quality, Diesel Retrofit Technology Verification, Verified Technologies,
B-71	6/12/2009	EPA Memo Re: Cost effectiveness estimates of CDPF for the compressor engine and the generator engines
B-72	06/14/2009	Anchorage Daily News – Point Lay Celebrates first Whale in 72 Years
B-73	06/21/2009	Petroleum News Vol. 14 No. 25 – New ship to Support Shell drilling

November 14, 2011 Page 86 of 197

EPA Exhibit		
Number	Date	Document Description
B-74	06/28/2009	Petroleum News Vol. 14 No. 26 – Revised Polar Bear Stocks out for Review
B-75	7/2/2009	Memo from Dave Bray to Rick Albright and Janis Hastings, "Implementing PSD Baseline Date, Baseline Areas, and Baseline Concentrations on the Outer Continental Shelf"
B-76	7/31/2009	Memo from Chris Hall, EPA, to Herman Wong, EPA, re: Wainwright Monitoring Data
B-77	08/20/2009	Marten Law Group: retreat of Arctic Ice Pack Poses Both Challenges and Opportunities in the American Arctic
B-78	08/23/2009	Petroleum News Vol. 14 No. 34 – EPA: Shell Air Permits Have Top Priority and Going Major on the OCS: Shell Opts for major Air Quality Permits for the Alaska Offshore Drilling Operations
B-79	9/10/2009	Oil & Gas Journal – Beaufort Sea Ruling Part of Bigger Alaska OCS Picture
B-80	09/13/2009	Petroleum News Vol. 14 No. 37 – Parnell Backs Alaska OCS Development
B-81	9/15/2009	Discoverer Data: ISC3P
B-82	9/15/2009	Discoverer Data: CO Start
B-83	9/22/2009	Memo from Gina McCarthy, Assistant Administrator, EPA-HQ, to Regional Administrators, Regions I-X, re: Withdrawal of Source Determinations for Oil and Gas Industries
B-84	09/28/2009	Email RE: KTUU Shell Oil Permit Hearing Draws Questions
B-85	10/7/2009	Proposed rule; reconsideration: Prevention of Significant Deterioration (PSD): Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by the Federal PSD Permit Program, 74 Federal Register 51535
B-86	10/23/2009	Input File Options and Criteria - Deadhorse

November 14, 2011 Page 87 of 197

EPA Exhibit	Data	Dogument Description
Number	Date	Document Description
B-87	11/01/2009	Petroleum News Vol. 14 No. 44 – Preparing and Planning for the OCS and Watching the Offshore Drilling From Afar
B-88	11/04/2009	Anchorage Daily News – Facing Environmental Lawsuits, Shell Reconsiders Arctic Drilling
B-89	11/08/2009	Petroleum News Vol. 14 No. 45 – Watching for the Ice in the Chukchi and Drilling Mud-Line Cellars for OCS Drilling
B-90	11/16/2009	Clēaire LONESTAR TM Quick Specs, CARB Verification letter dated December 23, 2008 and Lonestar TM Off-Road Verified Engine Family List dated January 2009.
B-91	11/17/2009	Anchorage Daily News – Icy Oil Spill easier to Clean, Scientists Say
B-92	11/20/2009	Oil & Gas Journal – Senate Committee Members Trade Barbs at OCS Technology Hearing
B-93	11/20/2009	Juneau Empire – Obama Delays Alaska Drilling Decision
B-94	11/25/2009	Model verification files created by Herman Wong, EPA on 11/25/2009. Folder includes: 3_Final Disco Impacts 4_Final Ice Management Impacts (Files not printed. See Chukchi Administrative Record Compact Disc at the following file path: B - Guidance, Background Information and Technical Analysis\B-94)
B-95	12/2009	Environmental Assessment, Shell Gulf of Mexico, Inc. 2010 Exploration Drilling Program Burger, Crackerjack, and SW Shoebill Prospects Chukchi Sea Outer Continental Shelf, Alaska prepared by MMS
B-96	12/04/2009	New York Times – In Alaska's Far North, Two Cultures Collide
B-97	12/07/2009	Oil & Gas Journal – EPA's GHG Endangerment Finding Set Stage for Regulations
B-98	12/14/2009	Verified Nonroad Engine Technologies, EPA Office of Transportation and Air Quality - Verified Nonroad Engine Retrofit Technologies.

November 14, 2011 Page 88 of 197

EPA Exhibit		
Number	Date	Document Description
B-99	12/14/2009	Potential Retrofit Technologies, EPA Office of Transportation and Air Quality - Summary of Potential Retrofit Technologies.
B-100	12/14/2009	Verified Technologies, EPA Office of Transportation and Air Quality – Verified Retrofit Technologies
B-101	01/2010	18 AAC 50.345 to 50.346 (2010)
B-102	01/03/2010	Petroleum News Vol. 15 No. 1 – Shell Goes For Reduced OCS Footprint
B-103	1/6/2010	Federal Register, Dept of Homeland Security, Coast Guard, Safety Zone; FRONTIER DISCOVERER, Outer Continental Shelf Drillship, Chukchi and Beaufort Sea, Alaska – 75 Federal Regulation 803
B-104	1/7/2010	Memorandum from Chris Hall, EPA to Herman Wong, EPA and Mary Portanova, EPA regarding Deadhorse Air Monitoring Data Review – October 23 through December 25, 2009
B-105	1/7/2010	Memorandum from Chris Hall, EPA to Herman Wong, EPA and Mary Portanova, EPA regarding Wainwright Air Monitoring Data Review – July 1 through October 31, 2009
B-106	01/14/2010	Shell Strives for Smaller Arctic Offshore Footprint
B-107	01/20/2010	20100120 McClatchy Newspaper Alaska Sen. Murkowski Attempt to Curb EPA Draws Criticism
B-108	01/22/2010	Activists Question Stringency of New EPA PSD Permit for Shell Offshore
B-109	2/17/2010	OSC/PSD Permit to Construct, Permit Number: R10OCS/PSD-AK-2010-01, Discoverer Drilling Unit (Beaufort), Shell Offshore, Inc. (proposed)
B-110	2/19/2010	Federal Register, Department of Interior, MMS, Environmental Documents Prepared for Proposed Mineral Exploration on the Alaska Outer Continental Shelf, 75 Fed. Reg. 7515
B-111	02/21/2010	Petroleum News Vol. 15 No. 8 – Beaufort Air Permit; EPA Issues Proposed Air Quality Permit for Shell's Beaufort Sea Drilling and Continuing Challenge to Arctic OCS Drilling

November 14, 2011 Page 89 of 197

EPA Exhibit		
Number	Date	Document Description
B-112	03/2010	Arctic NPDES General Permit (AKG-28-0000), Information Sheet, March 2010
B-113	03/04/2010	Inside EPA - Targeting EPA's Permitting Authority
B-114	3/10/2010	Memorandum form Paul Boys, EPA, to Pat Nair, EPA, Re: Review of the Shell Frontier Discoverer Drillship Stack Test Plan
B-115	3/11/2010	Memorandum from Paul Boys, Environmental Engineer Investigations and Engineering Unit, OEA to File, Re: Cost Effectiveness Estimates for HPU Engine Replacement on the Frontier Discoverer (Shell Chukchi Sea OCS Permit)
B-116	3/17/2010	Dave Bray notes from March 17, 2010 call with Mark Prettyman, State of Delaware
B-117	3/23/2010	EPA R10 General NPDES Webpage, Oil and Gas, Arctic Oil and Gas General Permits
B-118	3/23/2010	Memorandum from Stephen D. Page, EPA, Re: Modeling Procedures for Demonstrating Compliance with PM2NAAQS
B-119	3/23/2010	Texas Administrative Code, Title 30, §§117.2100, .2103, .2110, .2125, .2130, .2135, .2145.
B-120	3/31/2010	Memorandum from Christopher Hall, Region 10 EPA, to Herman Wong and Mary Portanova, EPA, Re: Wainwright Particulate Matter Data Review – July 1 through December 7, 2009
B-121	3/31/2010	Memorandum from Christopher Hall, Region 10 EPA, to Herman Wong and Mary Portanova, EPA, Re: Wainwright Air Monitoring Data Review – Nov. 1 through Dec. 7, 2009
B-122	4/2/2010 (signed on 3/29/10)	Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs; Final Rule, 75 Fed. Reg. 17004 (signed March 29, 2010; published on April 2, 2010)
B-123	No Date	Conditional Test Method 038 - "Measurement of Ammonia Emissions from Highway, Nonroad, and Stationary Use Diesel Engines by Extractive Fourier Transform Infrared (FTIR) Spectroscopy" http://www.epa.gove/tnn/emc.ctm.html

November 14, 2011 Page 90 of 197

EPA Exhibit Number	Date	Document Description
B-124	No Date	Summary Table: Deadhorse MQO Development - Final

Return to Section B

Return to Table of Contents

November 14, 2011 Page 91 of 197

Section BB: Guidance, Background Information, and Technical Analysis (cont.)

EPA		ckground information, and Technical Analysis (cont.)
Exhibit Number	Date	Document Title
BB-1	12/5/1991	Fed. Reg. Vol. 58, No. 234, Proposed Rule, 40 CFR Part 55 [FLR 4035] Outer Continental Shelf Air Regulations, Proposed Rule
BB-2	9/04/1992	Fed. Reg. Vol. 57, No. 173, Rules and Regulations, 40 CFR Part 55 [FRL-4200-9] Outer Continental Shelf Air Regulations, Final Rule
BB-3	2010	EPA ANWR-VISCREEN Modeling
BB-4	2009	Nuiqsut Q3 Alaska Photo
BB-5	7/2009	Nuiqsut July 2009 PM2.5 Hourly Values
BB-6	7/05/2009	Petroleum News Vol. 14 No. 27 – Beaufort Sea Drilling Plan Appeal Ends
BB-7	8/11/2009	Oil and Gas Journal – Shell's Plan for Beaufort Sea Advances
BB-8	8/16/2009	Petroleum News Vol. 14 No. 33 – MMS: Shell's New Beaufort Plan Complete
BB-9	8/30/2009	Petroleum News Vol. 14 No. 35 – Court Upholds Beaufort Sale Decision
BB-10	9/27/2009	Petroleum News Vol. 14 No. 39– New Comment Deadline for Beaufort Plan
BB-11	10/19/2009	Anchorage Daily News Article: Shell Gets Conditional OK for Beaufort Sea Drilling Plan
BB-12	10/20/2009	Oil and Gas Journal – MMS Conditionally Approve Shell's Beaufort Sea Exploration Plan
BB-13	10/25/2009	Petroleum News Vol. 14 No. 43 OK for Shell Plan: MMS Approves Beaufort Sea Drilling if Permitting Requirements are Met

November 14, 2011 Page 92 of 197

EPA Exhibit Number	Date	Document Title
BB-14	11/02/2009	NBC KUTT News – Barrow Wary of Shell's Upcoming Exploration of Beaufort Sea
BB-15	11/15/2009	Petroleum News Vol. 14 No. 46 – Beaufort Leasing in State's 'Best Interest'
BB-16	12/15/2009	Offshore Drilling: Enviro, Native Groups Sue Over Beaufort Sea Plan
BB-17	12/20/2009	Petroleum News Vol. 14 No. 51 – Groups Sue to Stop Beaufort Sea Drilling and NSB Not Part of Suits Against MMS
BB-18	12/27/2009	Petroleum News Vol. 14 No. 52 – State Intervenes in Beaufort Sea Litigation
BB-19	4/01/2010	Memorandum from Stephen D. Page, Office of Air Quality Planning & Standards, to Air Division Directors & Deputies, Regions I – X, Re: Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality
BB-20	4/07/2010	Memo from Chris Hall, EPA, to Mary Portanova, EPA, re: Badami Air Monitoring Data Review – Aug 15 through Dec 15, 2009
BB-21	4/08/2010	Memo from Christopher Hall, Region 10 EPA, to Mary Portanova, EPA, Re: Badami PM2.5 Data Review Final
BB-22	2/26/2010	Email from Linsey Debell, AECOM, to Herman Wong, EPA re: Shell Beaufort Monitoring Quality Assurance Project Plans

Return to Section BB

Return to Table of Contents

November 14, 2011 Page 93 of 197

Section C: Correspondence and Communication between EPA and Shell (including Shell contractors)

EPA		
Exhibit Number	Date	Document Description
C-1	3/11/2008	Letter from Joyce Kelly, EPA to Susan Childs, Shell, Re: Meteorological Data Collection in the Outer Continental Shelf of the Beaufort Sea for Permitting Purposes
C-2	8/4/2008	Letter from Joyce Kelly, EPA, to Susan Childs, Shell, Subject: Meteorological Monitoring Protocol for Beaufort Sea and Site Visit
C-3	8/25/2008	Email from Pat Nair at EPA to Susan Childs, Shell, Subject: Re: Meeting on August 28 th ?
C-4	8/26/2008	Email from Susan Childs, Shell, to Pat Nair, EPA, Regarding Cancelling the Technical Meeting Scheduled on August 28, 2008
C-5	8/27/2008	Email from Herman Wong, EPA, to Susan Childs, Shell, Regarding the Met Monitoring Protocol
C-6	9/11/2008	Email from Thomas Damiana at AECOM to Herman Wong, EPA Region 10. Subject: Thanks!!
C-7	9/16/2008	Email from Susan Childs at Shell to Herman Wong, EPA Region 10. Subject: RE: Met Monitoring Protocol
C-8	10/14/2008	Email from Thomas Damiana at AECOM to Herman Wong, EPA Region 10. Subject: ConocoPhillips Chukchi Sea Permitting – Wainwright Ambient Monitoring Program
C-9	10/14/2008	Email from Susan Childs at Shell to Herman Wong, EPA Region 10. Subject: RE: Chukchi Sea Buoy Data Collection
C-10	10/15/2008	Email from Wayne Wooster to Warren Horowitz, MMS, and Herman Wong, EPA, re: MMS-EPA-Shell Beaufort Sea Met Monitoring Meeting-Teleconference
C-11	10/22/2008	E-mail from Kyle Parker, Patton Boggs, LLP to Julie Vergeront, EPA regarding White Paper on Fleet Emissions
C-12	10/23/2008	Email from Wayne Wooster at ASRC ENERGY to Herman Wong, EPA Region 10. Subject: RE: Wednesday PM, 22 October 2008 Telephone Call
C-13	10/23/2008	Email from Rodger Steen at Air Sciences to Herman Wong, EPA Region 10. Subject: RE: Wednesday PM, 22 October 2008 Telephone Call (correction)

November 14, 2011 Page 94 of 197

EPA		
Exhibit Number	Date	Document Description
C-14	11/14/2008	Email from Thomas Damiana at AECOM to Herman Wong, EPA Region 10. Subject: ConocoPhillips Chukchi Sea Modeling – Meteorological Data Recovery and Missing Data Substitution
C-15	11/17/2008	Email from Thomas Damiana at AECOM to Herman Wong, EPA Region 10. Subject: Conoco-Phillips Wainwright Near-Term Monitoring Station AS-Built Photos
C-16	11/18/2008	Email from Thomas Damiana at AECOM to Herman Wong, EPA Region 10. Subject: RE: Conoco-Phillips Wainwright Near-Term Monitoring Station QAPP
C-17	11/21/2008	E-mail from Julie Vergeront, EPA to Kyle Parker, Patton Boggs, LLP regarding Shell Alaska
C-18	11/24/2008	Email from Thomas Damiana at AECOM to Herman Wong, EPA Region 10. Subject: ISC-Screen Protocol for Simulation Horizontal and Capped Stacks
C-19	11/25/2008	Email from Thomas Damiana at AECOM to Herman Wong, EPA Region 10. Subject: RE: ISC-Screen Protocol for Simulation Horizontal and Capped Stacks
C-20	12/10/2008	Email from Pat Nair, EPA, to Susan Childs, Shell, Subject: Follow-Up on Our Call This Afternoon
C-21	12/18/2008	E-mail from Susan Childs, Shell to Rick Albright, EPA, regarding Meeting Agenda for December 19, 2009
C-22	12/19/2008	Email from Nancy Helm at EPA Region 10, to Pat Nair, EPA. Subject: Dec. 19 Meeting with Shell
C-23	12/22/2008	Email from Thomas Damiana at AECOM to Christopher Hall, EPA Region 10. Subject: RE: ConocoPhillips Wainwright Near-Term Monitoring Station QAPP
C-24	12/23/2008	Email from Susan Childs, Shell,. to Rick Albright, EPA Region 10. Subject: Re: We Received a Hard Copy of the Disco Permit Application
C-25	12/23/2008	Email from Rick Albright, EPA Region 10, to Nancy Helm, EPA Region 10. Subject Re: Dec. 19 Meeting with Shell
C-26	1/6/2009	Email from Pat Nair, EPA to Mark Schindler, Octane, regarding Proposed January 14 Meeting

November 14, 2011 Page 95 of 197

EPA Exhibit		
Number	Date	Document Description
C-27	1/6/2009	Email from Mark Schindler, Octane, to Pat Nair, EPA. Subject: Re: Proposed January 14 Meeting
C-28	1/16/2009	Letter from Richard Albright, EPA, to Susan Childs, Shell. Regarding the Incompleteness Determination for the Chukchi PSD Permit Application
C-29	1/20/2009	Email from Denise Cortezano, EPA Region 10, to Pat Nair, EPA, Agenda for Jan 20 meeting -Call with Shell
C-30	1/21/2009	Email from Rodger Steen, Air Sciences to Pat Nair, EPA. Subject: Air Sciences Application Update
C-31	1/21/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Air Sciences Application Update
C-32	1/21/2009	Letter from Nancy Helm, EPA Region 10, to Susan Childs, Shell. Acknowledgement of Notification of Municipal Waste Combustion Units Exemption Under NSPS Subpart CCCC (misdated 1/21/2008)
C-33	1/22/2009	Email from Rodger Steen, Air Sciences, to Herman Wong, EPA Region 10. Subject: spreadsheet calcs Attach A, Item B, 9
C-34	1/22/2009	Rodger G Steen, Air Sciences, to Sabrina Pryor, Air Sciences, regarding Shell Disco / Chukchi - Re-formatted emissions information for presentation
C-35	1/23/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Shell OCS and Leasing Stipulations – MMS
C-36	1/26/2009	Email from Rodger Steen, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: Scheduled Conference Call
C-37	1/26/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA,. Subject: Re: Scheduled Conference Call
C-38	1/27/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Scheduled Conference Call
C-39	1/28/2009	Email from Eric Hansen, ENVIRON to Pat Nair, EPA,. Subject: RE: 04 February 2009 Conference Call

November 14, 2011 Page 96 of 197

EPA Exhibit	D.	
Number	Date	Document Description
C-40	1/28/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: Appendix A Comments
C-41	1/28/2009	Email from Pat Nair, EPA, to Herman Wong, Nancy Helm, Rob Wilson, EPA Region 10. Subject: Call with Rodger this Morning
C-42	1/28/2009 Folder	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA,. Subject: Shell & Cat D399 Stack Test Report (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\C-42)
C-43	2/2/2009	Email from Thomas Damiana, AECOM to Herman Wong, EPA Region 10. Subject: RE: Meteorological and Air Quality Data Collection Programs Representative of the Beaufort Sea
C-44	2/2/2009	Email from Thomas Damiana, AECOM to Herman Wong, EPA Region 10. Subject: RE: Conference Call for 3 February 2008: Meteorological and Air Quality Data Collection
C-45	2/2/2009 Folder	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: Plume Ht (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\C-45)
C-46	2/4/2009	Email from Mark Schindler, Octane, to Pat Nair, EPA. Subject: RE: 04 February 2009 Conference Call
C-47	2/4/2009	Email from Mark Schindler, Octane, to Pat Nair, EPA. Subject: Re: 04 February 2009 Conference Call
C-48	2/9/2009	Email from Rodger Steen, Air Sciences, to Herman Wong, EPA Region 10. Subject: Draft minutes of 2/3/09 EPA – Shell conference call
C-49	2/12/2009	Email from Rodger Steen, Air Sciences, to Herman Wong, EPA Region 10. Subject:
C-50	2/19/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Zipp and Zonen Observation
C-51	2/19/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: ConocoPhillips Preliminary Monitoring Proposal

November 14, 2011 Page 97 of 197

EPA Exhibit	Б.	
Number	Date	Document Description
C-52	2/24/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: FW: Zipp & Zonen Observation 2/23 - 2/25
C-53	2/24/2009	Email from Mark Schindler, Octane, to Nancy Helm, EPA Region 10, regarding Withdrawing the Kulluk Permit
C-54	3/1/2009	Wainwright Near-Term Ambient Air Quality Monitoring Program, First Quarter Data Report, November 2008-January 2009
C-55	3/5/2009	E-mail from Nancy Helm, EPA to Mark Schindler, Octane, regarding EPA Information Needs
C-56	3/10/2009	Email from Mark Schindler, Octane to Herman Wong, EPA Region 10. Subject: RE: Thursday Meeting and Conf. Call
C-57	3/11/2009	Email from Mark Schindler, Octane, to Herman Wong, EPA Region 10. Subject: 3/12 Meeting Agenda
C-58	3/12/2009	Letter from Richard Albright, EPA, to Susan Childs, Shell, regarding Incompleteness Determination for the Chukchi PSD Permit Application Received on February 24, 2009 Attachment 1: Attachment A Attachment 2: Attachment B
C-59	3/13/2009	E-mail from Lance Tolson, Shell, to Julie Vergeront, EPA, regarding Information from Conference Call of 3/10 and Further Information on U.S. Coast Guard Temporary Safety Zone
C-60	3/14/2009	E-mail from Mark Schindler, Octane, to Nancy Helm, EPA, regarding TSZ
C-61	3/18/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: Wainwright Quarterly Monitoring Report
C-62	3/18/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Confirmation of Boise Meeting – Disco/Chukchi Application
C-63	3/21/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Draft Responses to EPA Second Incompleteness Letter
C-64	3/23/2009	Email from Mark Schindler, Octane, to Nancy Helm, EPA. Regarding Fwd: Air Permit Clarification

November 14, 2011 Page 98 of 197

EPA Exhibit	Dete	Danisat Danistics
Number	Date	Document Description
C-65	4/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Data format I the First Quarter Report
C-66	4/2/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Cat D399 Questions
C-67	4/3/2009	Email from Rodger Steen, Air Sciences to Pat Nair, EPA. Subject: Re: Cat D399 Questions
C-68	4/3/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Cat 3304, D343 and C-15 Request
C-69	4/3/2009	Email from Sabrina Pryor, Air Sciences, to Pat Nair, EPA. Subject: Re: Discoverer Stack Test Report –D399
C-70	4/3/2009	Email from Mark Schindler, Octane, to Nancy Helm, EPA. Regarding Air Permit Clarification
C-71	4/6/2009	Letter from Rodger Steen, Air Sciences to Pat Nair, EPA. Subject: RE: Cat 3304, D343 and C-15 Request
C-72	4/6/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Ice Management Fleet Compliance Condition
C-73	4/6/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: Cementing/Logging Unit Question
C-74	4/6/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: Re: CDPF Question
C-75	4/7/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: Wainwright Near-Term Monitoring – March 2009 Monitoring Summary
C-76	4/7/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: Re: CDPF Question
C-77	4/8/2009	Email from Paul Boys, EPA, to Rodger Steen, Air Sciences, Re: Shell Discoverer PSD Permit – Additional BACT Information Request

November 14, 2011 Page 99 of 197

EPA Exhibit	Data	De coment Description
Number	Date	Document Description
C-78	4/8/2009	Email from Sabrina Pryor, Air Sciences to Pat Nair, EPA. Subject: Re: Cementing/Logging Unit Question
C-79	4/8/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Follow-up on Cat D399, 3304 and D343
C-80	4/8/2009	Shell and R10 Executive Management Coordination Meeting, Air Permitting: Chukchi & Beaufort Sea Exploratory Drilling Agenda and Presentation Photos
C-81	4/8/2009	E-mail from Mark Schindler, Octane, to Janice Hastings, EPA Region 10, regarding Meeting this Wed at 12:00
C-82	4/9/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: More on the D399 Engines
C-83	4/9/2009	Email from Sabrina Pryor, Air Sciences, to Pat Nair, EPA. Subject: Re: Follow-up on 4-71 and 3-71 Engines
C-84	4/9/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: Re: Follow-up on 4-71 and 3-71 Engines 1
C-85	4/9/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: Re: Follow-up on 4-71 and 3-71 Engines 2
C-86	4/9/2009	Email from Sabrina Pryor, Air Sciences, to Pat Nair, EPA. Subject: Re: Follow-up on Cat D399, 3304 and D343
C-87	4/9/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: Re: Follow-up on Cat D399, 3304 and D343
C-88	4/9/2009	Email from Louise Roach, Clean AIR Systems, to Pat Nair, EPA, Subject: Re: Emissions Guidebook from CleanAIR Systems
C-89	4/9/2009	Email from Pat Nair at EPA Region 10 to Louise Roach, CleanAIR Systems. Subject: Re: Emissions Guidebook from CleanAIR Systems
C-90	4/9/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Last Question on D399s

November 14, 2011 Page 100 of 197

EPA Exhibit	Б.	
Number	Date	Document Description
C-91	4/9/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Last Question on D399s
C-92	4/9/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: CleanAIR Systems and CDPF PTE
C-93	4/9/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: CDPF and FD 12-20 Question
C-94	4/9/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Last Question on D399s
C-95	4/10/2009	Email from Lance Tolson, Shell, to Julie Vergeront, EPA Region 10. Regarding a Request for TSZ Around the Frontier Discoverer.
C-96	4/12/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Associated Emissions
C-97	4/13/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Discoverer – Small Source Emissions Spreadsheet
C-98	4/14/2009	Email from Tim Martin, Air Sciences, to Herman Wong and Pat Nair, EPA. Subject: Re: The Ice Breaker and OSR Fleets
C-99	4/14/2009	E-mail from Herman Wong, EPA, to Thomas Damiana, AECOM, regarding 1020 Question
C-100	4/15/2009	Email from Kirk Winges, ENVIRON, to Herman Wong and Rob Wilson, EPA. Subject: PM2.5
C-101	4/15/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Incinerator PM Emissions
C-102	4/16/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Questions and Confirmations – Shell Chukchi
C-103	4/16/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Q Re: Questions and Confirmations – Shell Chukchi

November 14, 2011 Page 101 of 197

EPA Exhibit		
Number	Date	Document Description
C-104	4/17/2009	Email from Pat Nair, EPA, to Rodger Steen,, Air Sciences. Subject: Re: Q Re: Questions and Confirmations — Shell Chukchi
C-105	4/20/2009	Email from Roger Steen, Air Sciences, to Paul Boys, EPA, Re: SCR System for Discoverer
C-106	4/20/2009	Email from Roger Steen, Air Sciences, to Paul Boys, EPA, Re: Additional BACT Information Request
C-107	4/20/2009	Email from Rodger Steen, Air Sciences to Pat Nair, EPA. Subject: Re: Q Re: Questions and Confirmations – Shell Chukchi 2
C-108	4/21/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Incinerator PM Emissions
C-109	4/21/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Q Re: Questions and Confirmations – Shell Chukchi
C-110	4/21/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: FW: Cementing v Logging
C-111	4/21/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: FW: X/Q For Icebreakers
C-112	4/21/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: FW: Cementing v Logging
C-113	4/22/2009	Email from Tim Martin, Air Sciences, to Pat Nair, EPA. Subject: FW: FW: Cementing v Logging
C-114	4/22/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA Subject: Re: Incinerator PM Emissions
C-115	4/22/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Ice Breakers
C-116	4/22/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Supply Ship Transit Emissions

November 14, 2011 Page 102 of 197

EPA Exhibit		
Number	Date	Document Description
C-117	4/23/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Conference Call re Icebreakers
C-118	4/23/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Conference Call re Icebreakers
C-119	4/23/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Conference Call re Icebreakers
C-120	4/23/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Conference Call re Icebreakers 2
C-121	4/23/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Conference Call re Icebreakers 3
C-122	4/23/2009	Email from Tim Martin, Air Sciences, to Herman Wong and Pat Nair, EPA. Subject: FW: Q Re: Questions and Confirmations – Shell Chukchi
C-123	4/24/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Narrative on Anchor Retrieval
C-124	4/24/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Dissolved Hydrocarbon Gas Release
C-125	4/24/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Diverters
C-126	4/27/2009	Email from Roger Steen, Air Sciences, to Pat Nair and Paul Boys, EPA, Subject: Shell Discoverer CDPF Guarantees. Included Two Attachments:
C-127	4/27/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Diverters
C-128	4/27/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Narrative on Anchor Retrieval
C-129	4/27/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Narrative on Anchor Retrieval

November 14, 2011 Page 103 of 197

EPA Exhibit	_	
Number	Date	Document Description
C-130	4/27/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA,. Subject: Proposed Compliance Plan
C-131	4/27/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Shell Discoverer CDPF Guarantees
C-132	4/27/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Shell Discoverer CDPF Guarantees
C-133	4/27/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Copy of Disco-only EI
C-134	4/27/2009	Email from Rodger Steen, Air Sciences, to Pat Nair and Paul Boys, EPA. Subject: Shell Discoverer CDPF Guarantees
C-135	4/28/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA. Subject: RE: Volume Sources
C-136	4/28/2009	Email from Rodger Steen, Air Sciences, to Pat Nair and Herman Wong, EPA. Subject: Re: Ice Mgmt Fleet – Alternate Operating Scenarios
C-137	4/28/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Diverters 2
C-138	4/29/2009	Email from Rodger Steen, Air Sciences, to Jan Hastings, EPA. Subject: Discoverer – Notification of Elimination of the Ambient Air Boundary Based on a Safety Zone
C-139	4/30/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Partial Load Impact Analysis – CO & SO2
C-140	4/30/2009	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA Region 10. Subject: Meeting notes from Wednesday
C-141	4/30/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Cementing & Logging Emissions
C-142	4/30/2009	Email from Rodger Steen, Air Sciences to Pat Nair and Herman Wong, EPA. Subject: Cementing & Logging Emissions

November 14, 2011 Page 104 of 197

EPA Exhibit Number	Date	Document Description
C-143	4/30/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: FW: Particulate Matter Emissions GS500C – Follow-Up
C-144	4/30/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Tier 2 Engine – Possible Filter
C-145	4/30/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Incinerator Emission Factor Report – Again
C-146	4/30/2009	E-mail from Janis Hastings, EPA Region 10, to Mark Schindler, Octane, regarding Copy of Disco-only El
C-147	5/1/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Tier 2 Engine – Possible Filter
C-148	5/1/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA, Subject: Re: Cementing & Logging Emissions 2
C-149	5/4/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Hydrocarbon Gas Released From Drilling Mud
C-150	5/4/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: FW: Frontier Discoverer Vessel & CDPF Control Efficiencies
C-151	5/4/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: FW: Frontier Discoverer Vessel & CDPF Control Efficiencies
C-152	5/4/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Draft EPA Discoverer Emissions Inventory
C-153	5/4/2009	CleanAIR System Proposal to Roger Steen, Air Sciences, Quotation Number: 09050401RW-F, PERMIT Filter System in a 304 Stainless Steel Double Wall Insulated Critical Grade Silencer
C-154	5/4/2009	E-mail from Herman Wong, EPA, to Pat Nair, EPA, regarding Meeting Notes from Wednesday
C-155	5/5/2009	Email from Pat Nair at EPA, to Rodger Steen, Air Sciences. Subject: Attached EI

November 14, 2011 Page 105 of 197

EPA Exhibit		
Number	Date	Document Description
C-156	5/5/2009	Email from Dianne Soderlund, EPA, re: Meeting to Discuss ESA MMPH for the Chukchi and Beaufort Permits
C-157	5/6/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA. Subject: RE: Partial load impact analysis – CO & S)2
C-158	5/6/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Discoverer – Ice Management Fleet ORR
C-159	5/7/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: OSR Fleet
C-160	5/7/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Suggestion on Handling of Ice Mgmt Fleet Emissions
C-161	5/11/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Nov 08 to Jan09 Wainwright AQ Measurements
C-162	5/12/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA. Subject: RE: What I Have and What I Need
C-163	5/12/2009	Email from Sabrina Pryor, Air Sciences, to Pat Nair, EPA. Subject: Updated EPA Inventory
C-164	5/13/2009	Email from Pat Nair, EPA, to Sabrina Pryor, Air Sciences. Subject: Re: Updated EPA Inventory
C-165	5/14/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Other Possible Ice Mgmt Vessels
C-166	5/14/2009	Email from Thomas Damiana, AECOM, to Herman Wong, Subject RE: 2nd Qtr Wainwright Audit Reports
C-167	5/14/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Kapitan Dranitsyn Use
C-168	5/15/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Other Possible Ice Management Vessels

November 14, 2011 Page 106 of 197

EPA Exhibit		
Number	Date	Document Description
C-169	5/18/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Wainwright Audit Reports
C-170	5/19/2009	Email from Roger Steen, Air Sciences, to Paul Boys, EPA, Subject: Discoverer Chukchi & IC Engine Good Maintenance Practice.
C-171	5/19/2009	Email from Tim Martin, Air Sciences to Herman Wong, EPA Region 10. Subject: Wainwright Discussion Tomorrow
C-172	5/19/2009	E-mail from Herman Wong, EPA Region 10, to Kirk Winges, ENVIRON, and Tim Martin, Air Sciences, regarding Minutes of 18 May 2009 Conference Call
C-173	5/19/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA. Subject: RE: Other Modeling Scenarios
C-174	5/19/2009	Email from Roger Steen, Air Sciences, to Paul Boys, EPA. Subject: Discoverer & Ammonia Slip
C-175	5/20/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Ice Mgmt Incinerator NOx Emissions
C-176	5/21/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: RE: Shell Discoverer Chukchi – Response to 2 nd incompleteness letter
C-177	5/21/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: Secondary Operating Scenarios
C-178	5/22/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: MLC Compressors and Cementing-Logging
C-179	5/22/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Shell Discoverer Chukchi – Supply Ship
C-180	5/22/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Final Emissions
C-181	5/26/2009	Email from Rob Wilson, EPA Region 10, to Janis Hastings, EPA Region 10. Subject: Supply Ship Modeling

November 14, 2011 Page 107 of 197

EPA Exhibit	_	
Number	Date	Document Description
C-182	5/26/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Nanuq and Resupply Ship Compliance
C-183	5/27/2009	Email from Roger Steen, Air Sciences, to Paul Boys, EPA, Subject: BACT and CCV on Disco Emission Sources, Including Attachment on Closed Crankcase Ventilation (CCV), Instruction Part Number 55021, Rev C. Parker Hannifin Corporation, April 2009
C-184	5/27/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: RE: Final emissions – Formal Submittal
C-185	5/27/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Final Emissions – Formal Submittal
C-186	5/28/2009	Email from Gene Pavia, UMIAQ, copied to Pat Nair, EPA. Subject: Re: Shell OCS and Leasing Stipulations – MMS (Attachment not readable)
C-187	5/28/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Shell OCS and Leasing Stipulations – MMS
C-188	5/28/2009	E-mail from Janis Hastings, EPA, to Mack Schindler, Octane, regarding Supply ship modeling
C-189	5/29/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Final Emissions and Modeling Results (Attachment is Application Addendum Dated May 29, 2009 in Permit Application Documents)
C-190	6/5/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA. Subject: RE: Shell Chukchi Sea and Beaufort Sea PSD Application
C-191	6/8/2009	Email from Tim Martin, Air Sciences, to Pat Nair, EPA. Subject: Re: Shell Chukchi and Beaufort Sea Applications (without attachment: see attachment in 6/5/09 email)
C-192	6/8/2009	E-mail from Herman Wong, EPA Region 10, to Tim Martin and Rodger Steen, Air Sciences, regarding Non-Criteria Air Pollutants
C-193	6/9/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Confirmation of Formal Submittals
C-194	6/9/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA, regarding Confirmation of Formal Submittals

November 14, 2011 Page 108 of 197

EPA Exhibit	_	
Number	Date	Document Description
C-195	6/9/2009	E-mail from Herman Wong, EPA Region 10, to Kirk Winges, ENVIRON, regarding Ice Removal – Disco Bow
C-196	6/10/2009	Email from Kirk Winges, ENVIRON to Herman Wong, EPA Region 10. Subject: Anchor Handler setting and retrieving anchors
C-197	6/10/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Draft Agenda
C-198	6/11/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Non-criteria Air Pollutants
C-199	6/11/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Non-criteria Air Pollutants 2
C-200	6/11/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Non-criteria Air Pollutants 4
C-201	6/12/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Non-criteria Air Pollutants 3
C-202	6/12/2009	Email from Pat Nair, EPA, to Herman Wong, Paul Boys and Sonia Porter, EPA. Subject: Fw: Disposition of Discoverer Sewage Sludge
C-203	6/12/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Title VI Substances – To Be Addressed
C-204	6/12/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Disposition of Discoverer Sewage Sludge
C-205	6/15/2009	EPA and Shell June 15, 2009 Draft Meeting Agenda
C-206	6/19/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Draft Agenda
C-207	6/22/2009	Emails from Susan Childs, Shell, to Janis Hastings, EPA Region 10. Regarding Shell and Follow-Up from Call

November 14, 2011 Page 109 of 197

EPA Exhibit		
Number	Date	Document Description
C-208	6/22/2009	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA Region 10. Subject: RE:
C-209	6/22/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Permit Processing Productivity Meeting
C-210	6/23/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Title VI Substances – to be addressed 2
C-211	6/23/2009	E-mail from Susan Childs, Shell, to Janis Hastings, EPA Region 10, regarding e-mail for Shell and follow up from call
C-212	6/24/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. RE Question re Resupply Ship
C-213	6/25/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Title VI Substances – to be addressed
C-214	6/26/2009	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA Region 10. Subject: RE:
C-215	6/26/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: JPEG of Figure 5-1
C-216	6/26/2009	E-mail from Pat Nair, EPA, to Kirk Winges, ENVIRON, Tim Martin, Air Sciences, and Herman Wong, EPA Region 10, regarding Anchor Setting Emissions
C-217	6/29/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: JPEG of Figure 5-1
C-218	6/30/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: More JPEGS
C-219	7/1/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Wainwright Near-Term Monitoring Station Renovation
C-220	7/1/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Wainwright Near-Term Monitoring Station Renovation

November 14, 2011 Page 110 of 197

EPA Exhibit	D. (
Number	Date	Document Description
C-221	7/1/2009	Wainwright Near-Term Ambient Air Quality Monitoring Program, Second Quarter Data Report, February through April 2009 Final
C-222	7/1/2009	E-mail from Janis Hastings, EPA Region 10, to Mark Schindler, Octane, regarding Title VI substances
C-223	7/1/2009	E-mail from Herman Wong, EPA Region 10, to Tim Martin, Air Sciences, regarding Associated emissions
C-224	7/2/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Today's Agenda
C-225	7/6/2009	E-mail and letter from Peter Slaiby, Shell, to Michelle Pirzadeh, EPA. Regarding Shell and EPA Region 10 Meeting, June 15, 2009
C-226	7/6/2009	Email from Pat Nair, EPA to Rodger Steen, Air Sciences. Subject: Re: FW: Title VI Potentials to Emit
C-227	7/6/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: FW: Title VI Potentials to Emit 2
C-228	7/7/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA. Subject: RE: Changes to ISC3_Prime
C-229	7/8/2009	E-mail from Janis Hastings, EPA Region 10, to Susan Childs, Shell, regarding Background air quality data (Wainwright)
C-230	7/10/2009	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA Region 10. Subject: RE: Graphics
C-231	7/10/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Question on D399 2
C-232	7/10/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: Re: Question on D399 3
C-233	7/13/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Wainwright Near-Term Ambient Air Quality Monitoring Program Second Quarter Data Report

November 14, 2011 Page 111 of 197

EPA Exhibit	D-4-	December 1 December 1
Number	Date	Document Description
C-234	7/13/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: Ice Removal – Disco Bow
C-235	7/13/2009	E-mail from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding Wainwright 2 nd qtr air data
C-236	7/14/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: Wainwright 2 nd qtr air data
C-237	7/14/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10. Subject: RE: Wainwright 2 nd qtr air data
C-238	7/14/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: FW: CleanAIR CDPFs and HiBACK Monitor
C-239	7/15/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: NSPS and NESHAPS
C-240	7/15/2009	E-mail from Doug Bopray, AECOM, to Christopher Hall, EPA Region 10, regarding Wainwright Near-term Monitoring Project PM 2.5 flow data
C-241	7/16/2009 Folder	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA Region 10. Subject: RE: Bow Washing emissions for 2.5 and 10 (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-241))
C-242	7/16/2009	Email from Pat Nair, EPA, to Herman Wong, EPA Region 10. Subject: Re: Bow Washing Emissions for 2.5 and 10
C-243	7/16/2009	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA Region 10. Subject: RE: Bow Washing emissions for 2.5 and 10
C-244	7/16/2009 Folder	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: Background (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-244)
C-245	7/16/2009	Email from Tim Martin to Herman Wong RE: Background with tables attached

November 14, 2011 Page 112 of 197

EPA Exhibit Number	Date	Document Description
C-246	7/16/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Question on D399
C-247	7/16/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA . Subject: Re: Question on D399(without attachment; see attachment with 7/16/09 email from Pat Nair to Roger Steen)
C-248	7/16/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA Subject: Re: NSPS and NESHAPS
C-249	7/16/2009	E-mail from Herman Wong, EPA Region 10, to Christopher Hall, EPA Region 10, forwarding 7/16/2009 email from Thomas Damiana, regarding Wainwright Near-Term Monitoring Program May 2009 Data Summary
C-250	7/16/2009	E-mail from Christopher Hall, EPA Region 10, to Herman Wong, EPA Region 10, regarding Brief notes from call with AECOM on Tuesday
C-251	7/17/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: Bow Washing emission for 2.5 and 10
C-252	7/23/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: RE: PM Data Collection at Wainwright
C-253	7/23/2009	E-mail from Herman Wong, EPA Region 10, to Dianne Soderlund, EPA Region 10, regarding Shell North Slope Site Visit-Trip Report
C-254	7/23/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10,regarding Wainwright Near-term Monitoring Project PM2.5 Data
C-255	7/23/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Shell's 2010 Chukchi Sea Exploration Drilling Program – Request for Letter of Authorization (LOA) for Incidental Take of Polar Bears and Pacific Walrus (attachment not delivered)
C-256	7/24/2009	Email from Nancy Helm, EPA Region 10, to Mark Schindler, Octane,. Regarding the Four Months of Data Requirement
C-257	7/27/2009	Letter from Michelle Pirzadeh,, EPA, to Peter Slaiby, Shell. Regarding Follow-Up to the June 15, 2009 EPA/Shell Meeting on Air Permits for the Chukchi and Beaufort Sea

November 14, 2011 Page 113 of 197

EPA Exhibit Number	Date	Document Description
C-258	7/27/2009	E-mail from Herman Wong, EPA Region 10, to Thomas Damiana, AECOM, regarding PM2.5 Collocated Sampling
C-259	7/27/2009	E-mail from Steve Ellsworth, ASRC ENERGY, to Janis Hastings, EPA Region 10, regarding LOA Cover Letter – Chukchi EP 2010
C-260	7/27/2009	E-mail from Nicole St. Amand, Shell, to Janis Hastings, EPA Region 10, regarding June Wainwright Data (attachment not delivered)
C-261	7/27/2009	E-mail from Doug Bopray, AECOM, to Christopher Hall, EPA Region 10 regarding Wainwright Near-Term Monitoring Project PM Concentration Data
C-262	7/28/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10. Subject: RE: Wainwright Near-term Monitoring Project PM2.5 Data
C-263	7/28/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: Wainwright Collocated FEM
C-264	7/28/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Confirmed OSR Fleet
C-265	7/28/2009	Email and attachment from Tom Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Wainwright Near Term June 2009 Data Summary
C-266	7/28/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Wainwright Near-Term Monitoring Project PM2.5 Data
C-267	7/28/2009	E-mail from Christopher Hall, EPA Region 10, to dgobeli regarding Zero offset for BAM 1020
C-268	7/29/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Proposed Meetings and Agenda
C-269	7/30/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences. Subject: Re: Missing Document
C-270	7/30/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA. Subject: FW: EPA Memo on NOx Emissions

November 14, 2011 Page 114 of 197

EPA Exhibit Number	Date	Document Description
C-271	7/30/2009	E-mail from Herman Wong, EPA Region 10, to Nicole St. Amand, Shell, regarding North Slope Visit
C-272	7/31/2009	Letter from Richard Albright, EPA, to Susan Childs, Shell, regarding, the Completeness Determination for the Chukchi PSD Permit Application
C-273	8/4/2009	Letter from Peter Slaiby, Shell to Michelle Pirzadeh, EPA. Regarding the Air Permitting Status
C-274	8/4/2009	E-mail from Janis Hastings, EPA Region 10, to Mark Schindler, Octane, re: Preliminary Draft-Chukchi Sea Permit.
C-275	8/4/2009	E-mail from Janis Hastings, EPA Region 10, to Mark Schindler, Octane, regarding Action Items – Meeting on 7/30/2009
C-276	8/5/2009 Folder	E-mail from Dave Bray, EPA Region 10, to Mark Schindler, Octane, regarding Final Emissions Inventory (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-276)
C-277	8/7/2009	E-mail from Peter Slaiby, Shell, to Michelle Pirzadeh, EPA. Regarding This Weeks Meeting (the Chukchi and Beaufort Sea Permit Schedule)
C-278	8/10/2009	E-mail from Janis Hastings, EPA Region 10, to Mark Schindler, Octane. Regarding Responses to draft Disco/Chukchi Permit – the largest issues
C-279	8/11/2009	Email from Rodger Steen, Air Sciences, to Herman Wong, EPA Region 10. Subject: RE: Responses to draft Disco/Chukchi Permit – the largest issue (without attachment; attachment on Steen email of 8/10/09 in Section A)
C-280	8/11/2009	Email from Rodger Steen, Air Sciences, to Herman Wong, EPA Region 10. Subject: Use of CCV on Disco primary generators
C-281	8/11/2009	E-mail from Kirk Lilley, Shell, to Julie Vergeront, EPA, regarding Shell – Chukchi Permittee Name
C-282	8/11/2009	E-mail from Rodger Steen at Air Sciences to Herman Wong, EPA Region 10. Subject: RE: Responses to draft Disco/Chukchi Permit – the largest issue

November 14, 2011 Page 115 of 197

EPA		
Exhibit Number	Date	Dogument Description
C-283	8/12/2009	Document Description Email from Rodger Steen, Air Sciences, to Herman Wong, EPA Region 10. Subject: Shell request for modification of draft permit location restrictions
C-284	8/12/2009	Email from Kirk Lilley, Shell, to Julie Vergeront, EPA, re: FWD: Chukchi Permit (Susan Childs' Authority to Sign for Shell Offshore Inc. and Shell Gulf of Mexico Inc.)
C-285	8/12/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Collocated Monitor
C-286	8/12/2009	E-mail from Janis Hastings, EPA Region 10, to Mark Schindler, Octane, regarding Collocated Monitor and Status
C-287	8/14/2009	Shell Memorandum for Discussion – Reasons Why OCS Permitting in the Beaufort Sea Costal Area Should Not be Much Shorter than Experienced in the Chukchi Sea
C-288	8/18/2009	Email from Mark Schindler, Octane to Janis Hastings, Region 10 EPA, Re: Checking In
C-289	8/18/2009	E-mail (#1) from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding Precision and Bias Measurements for PSD Preconstruction Monitoring at Prudhoe Bay Alaska.
C-290	8/18/2009	Email (#2) from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM. Regarding Precision and Bias Measurements for PSD Preconstruction Monitoring at Prudhoe Bay Alaska.
C-291	8/18/2009	Email (#3) from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, Regarding Precision and Bias Measurements for PSD Preconstruction Monitoring at Prudhoe Bay Alaska.
C-292	8/19/2009	Email from Herman Wong, EPA Region 10, to Thomas Damiana, AECOM, regarding Precision and Bias Measurements for PSD Preconstruction Monitoring at Prudhoe Bay Alaska.
C-293	8/20/2009	Letter from Michelle Pirzadeh, EPA, to Peter Slaiby, Shell, Regarding EPA's Process for Issuing Shell's Chukchi and Beaufort Sea Permits
C-294	8/20/2009	Diagram of Semi-Parallel Processing Schedule: Shell EPA PSD Air "Major Source" Permits for the Discoverer Drill Vessel in Chukchi and Beaufort Seas, AK
C-295	8/21/2009	Email from Mark Schindler, Octane, to Janis Hastings, Region 10 EPA, Re: Call today to Seattle Attachment from Mark Schindler, Octane, Re: Call Today, Beaufort Processing Schedule Final

November 14, 2011 Page 116 of 197

EPA		
Exhibit Number	Date	Dogument Description
C-296	8/21/2009	Document Description Letter from Susan Childs, Shell, to Richard Albright, Director, Office of Air, Waste and Toxics Re: Partial Incompleteness Letter Response Permit Application for Frontier Discoverer Drill Vessel in Beaufort Sea
C-297	8/21/2009	Email form Mark Schindler, Octane, to Janis Hastings, EPA Region 10, re: FWD: This Week's Meeting
C-298	8/21/2009	E-mail from Michelle Romak, Shell to Michelle Pirzadeh, EPA Regarding This Weeks Meeting with EPA
C-299	8/22/2009	E-mail from Peter Slaiby, Shell to Michelle Pirzadeh, EPA Regarding This Weeks Meeting with EPA (without attachment; see attachment email of 8/21/2009)
C-300	8/24/2009	Email from Mark Schindler, Octane, to Janis Hastings, Region 10 EPA, Re: Agenda Attachment from Mark Schindler, Octane, Re: Meeting Agenda: August 25, 2009 Shell and R10 Meeting Regarding Beaufort Sea Major PSD Permit
C-301	8/25/2009	Memo from Julie Vergeront, EPA R10, to Administrative Record, re: Meeting with Shell Regarding OCS/PSD Permits for Frontier Discoverer Operations in the Chukchi and Beaufort Seas Att. 1: Meeting Agenda Att. 2: Attendance Signature Page Att. 3: Shell's Proposed Processing Schedule
C-302	8/26/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding North Slope Particulate Summary (with spreadsheet data)
C-303	8/26/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Recently PM 2.5 Wainwright Measurements
C-304	8/28/2009 Folder	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Wainwright Third Monitoring Quarter 2009 Data Summary. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-304)
C-305	8/31/2009	Email from Herman Wong, EPA Region 10, to Robert Elleman, EPA, Forwarding 8/28/2009 email from Warren Horowitz, MMS, to Herman Wong, EPA Region 10, Re: FW: MMS surface-Meteorological buoy

November 14, 2011 Page 117 of 197

EPA Exhibit		
Number	Date	Document Description
C-306	9/1/2009	Letter from Peter E. Slaiby, Shell,, to Michelle Pirzadeh, EPA Region 10, re: August 25, 2009 Meeting
C-307	9/2/2009	Email from Mark Schindler, Octane, to Janis Hastings, Region 10 EPA, Re: Letter to EPA from Shell Attachment from Mark Schindler, Octane, Re: September 1, 2009 letter from Peter Slaiby, Shell, to Michelle Pirzadeh, Region 10 EPA
C-308	09/8/2009	Email from Janis Hastings, EPA, to Natasha Greaves, EPA, re: Shell/EPA Meeting and White Paper Att. 1: Memorandum for Discussion – Reasons Why OCS Permitting in the Beaufort Sea Costal Area Should Not be Much Shorter than Experienced in the Chukchi Sea
C-309	9/8/2009	Email from Mark Schindler, Octane, to Janis Hastings, Region 10 EPA, Re: Meeting and White Paper
C-310	9/8/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Proposed Deadhorse Monitoring Location
C-311	9/11/2009	Email from Mark Schindler, Octane, to Janis Hastings, EPA, re: Beaufort Sea Processing Memo For Discussion Att. 1: Memorandum for Discussion – Reasons Why OCS Permitting in the Beaufort Sea Costal Area Should Not be Much Shorter than Experienced in the Chukchi Sea Updated 9-11
C-312	9/14/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Wainwright First Quarter Report – with attachments
C-313	9/17/2009	Email from Janis Hastings, EPA, to Mark Schindler, Octane, re: Beaufort Sea Processing Memo for Discussion Att. 1: Memorandum for Discussion – Reasons Why OCS Permitting in the Beaufort Sea Costal Area Should Not be Much Shorter than Experienced in the Chukchi Sea Updated 9-11
C-314	9/17/2009	Email from Mark Schindler Octane, to Janis Hastings, Region 10 EPA, Re: Beaufort Sea Processing Memo for Discussion (without attachment; see attachment in 9/17/2009 email from Janis Hastings, EPA Region 10, to Mark Schindler, Octane)
C-315	9/21/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding FEM FRM Designation
C-316	9/21/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Deadhorse FRM Sampler

November 14, 2011 Page 118 of 197

EPA Exhibit		
Number	Date	Document Description
C-317	9/22/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding North Slope Monitoring Station Map
C-318	9/23/2009	Email from Janis Hastings, EPA Region 10, to Mark Schindler, Octane, re: Response Letter is Attached to Mr. Peter Slaiby. Attachment: Letter from Michelle Pizadeh, EPA Region 10, to Peter Slaiby, Shell, Re: Response to Summarizing 2009 August 25 Meeting Including Suggestions for Accelerating the Schedule for Issuance of Air Permits for Exploratory Drilling in the Beaufort Sea.
C-319	9/23/2009	Letter from Michelle Pirzadeh, EPA R10, to Peter E. Slaiby, Shell. Shell Exploration and Production, re: Response to September 1, 2009 Letter
C-320	9/30/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Wainwright Near-Term Monitoring August 2009 Monthly Report
C-321	10/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Deadhorse PM 2.5 Monitoring Design
C-322	10/6/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Collocated monitoring requirements
C-323	10/13/2009 Folder	E-mail from Herman Wong, EPA Region 10, to Thomas Damiana, AECOM, regarding Validation and Summary of Wainwright Data Nov 08 to Jul 09.(Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-323)
C-324	10/13/2009	E-mail from Janis Hastings, EPA, to Juliane Matthews, EPA forwarding email from John Iani, on behalf of Shell, to Michelle Pirzadeh, EPA re: News Article on Shell Permits
C-325	10/19/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Deadhorse Project DQOs
C-326	10/20/2009	Email from Kirk Lilley, Shell, to Janis Hastings, EPA Region 10, Re: Shell-Response to Earthjustice Letter on Monitoring
C-327	10/20/2009	Email from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding Deadhorse Project DQOs

November 14, 2011 Page 119 of 197

EPA Exhibit		
Number	Date	Document Description
C-328	10/21/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Deadhorse Particulate Monitoring
C-329	10/21/2009	E-mail from Pat Nair, EPA, to Pat Nair, EPA, regarding Clarification Needed on Icebreaker #2
C-330	10/22/2009	Email from Mark Schindler, Octane to Janis Hastings, EPA Region 10, regarding Deadhorse Station
C-331	10/26/2009 Folder	Email from Linsey DeBell, AECOM, to Chris Hall, EPA Region 10, regarding PEP Data (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-331)
C-332	10/28/2009	E-mail from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding CPAI-Wainwright Data (without attachment; see attachment to 10/28/09 email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10)
C-333	10/28/2009	E-mail from Herman Wong, EPA Region 10, to Brad Thomas, ConocoPhillips, regarding Deadhorse Update (without attachment; see attachment in incoming email in Section D)
C-334	10/28/2009	E-mail from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding CPAI-Wainwright Data
C-335	10/30/2009	Email from Herman Wong, EPA Region 10, to Thomas Damiana, AECOM, regarding Call on Monday, 02 November 2009
C-336	10/30/2009	Email from Christopher Hall, EPA Region 10, to Linsey DeBell, AECOM, regarding 2005-06 Collocated PM2.5 data
C-337	11/3/2009	E-mail from Pat Nair, EPA, to Herman Wong, EPA Region 10, regarding Shell Request 3.1
C-338	11/9/2009	EPA Permit Status: Shell's Applications for Chukchi and Beaufort Seas, Timeline
C-339	11/12/2009	Email from Janis Hastings, EPA Region 10, to Mark Schindler, Octane, re: Confirming Call

November 14, 2011 Page 120 of 197

EPA Exhibit		
Number	Date	Document Description
C-340	11/12/2009	Email from Eric Hansen, ENVIRON to Pat Nair, EPA regarding Reminder on Chukchi "must haves"
C-341	11/13/2009 Folder	Email from Linsey DeBell, AECOM, to Chris Hall, EPA Region 10, regarding State PM 2.5 Data (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\C-341)
C-342	11/17/2009	Email from Pat Nair, EPA, to Kirk Winges, ENVIRON, regarding Closing Loop on Changes
C-343	11/18/2009	Email from Kurt Winges, ENVIRON, to Pat Nair, EPA re: Kilabuck
C-344	11/18/2009	Memo from Julie Vergeront, EPA Region 10, Re: Meeting with Shell regarding OCS/PSD permits for Frontier Discoverer operations in the Chukchi Beaufort Seas Attach 1: Attendance Signature Page Attach 2: Preliminary Agenda Attach 3: Agenda Prepared by Shell
C-345	11/18/2009	Email from Linsey Bell, AECOM, to Christopher Hall, EPA Region 10, regarding Deadhorse Statistical Approach
C-346	11/18/2009	E-mail from Chris Hall, EPA Region 10, to Linsey Bell, AECOM, re Deadhorse Oct Nov Report with Attachments
C-347	11/18/2009	Email from Herman Wong, EPA Region 10 to Janis Hastings, EPA Region10, Re: AQIA Handout at 17 November 2009 Meeting
C-348	11/20/2009	E-mail from Pat Nair, EPA to Kirk Winges, ENVIRON, regarding Scale Idea
C-349	11/20/2009	E-mail from Janis Hastings, EPA to Mark Schindler, Octane, regarding AQIA Handout at 17 November 2009 Meeting
C-350	11/25/2009	Email from Dave Bray, EPA Region 10, to Pat Nair, EPA, re: Important Items from 11/24/09 Call with Pete Slaiby and Susan Childs
C-351	11/25/2009	Email with attachment from Tom Damiana, AECOM, to Christopher Hall, EPA Region 10, re Revision to the Wainwright QAPP. (updated December 2009)

November 14, 2011 Page 121 of 197

EPA Exhibit		
Number	Date	Document Description
C-352	11/27/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Call on Friday?
C-353	11/30/2009 Folder	Email from Thomas Damiana, AECOM to Christopher Hall Deadhorse Particulate Monitoring QAPP Draft Rev 02 (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-353)
C-354	12/1/2009	Shell Overview, Chukchi and Beaufort PSD Air Permits Prevention of Significant Deterioration (PSD), North Slope Borough Assembly.
C-355	12/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10. Subject: Deadhorse October through November 2009 Monitoring Summary with attachment "Deadhorse PM2.5 Monitoring Program Monthly Preliminary Data Summary October – November 2009"
C-356	12/2/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10. Subject: Revision to the Wainwright QAPP
C-357	12/2/2009 Folder	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10. Subject: Deadhorse Particulate Monitoring QAPP Draft Rev. 02 (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-357)
C-358	12/2/2009 Folder	Email from Thomas Damiana, AECOM, to Herman Wong Subject: Wainwright 4 th Monitoring Quarter 2009 Data Summary (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-358)
C-359	12/2/2009	E-mail from Kirk Winges, ENVIRON, to Pat Nair, EPA, regarding Marine engine regs.
C-360	12/2/2009	E-mail from Rodger Steen, Air Sciences to Pat Nair, EPA, regarding Shell Chukchi – Confirmation on Other Vessels
C-361	12/2/2009 Folder	E-mail from Chris Hall, EPA to Thomas Damiana, AECOM regarding Wainwright Fourth Monitoring Quarter 2009 Data Summary (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-361)

November 14, 2011 Page 122 of 197

EPA Exhibit		
Number	Date	Document Description
C-362	12/3/2009	Memo from Suzanne Skadowski, EPA Region 10, Re: Meeting with Shell regarding OCS/PSD permits for Frontier Discoverer operations in the Chukchi and Beaufort Seas
C-363	12/3/2009 Folder	E-mail from Rodger Steen, Air Sciences, to Pat Nair, EPA regarding GHG emissions manual – O&G (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\C-363)
C-364	12/7/2009	Email from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding Deadhorse Precision and Bias Goals
C-365	12/7/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding RSLO Version of the Deadhorse Draft QAPP Revision 2 nd Version
C-366	12/7/2009	E-mail from Pat Nair, EPA to Rodger Steen, Air Sciences and Kirk Winges, ENVIRON, regarding Clarification on Hull 24 with attachments
C-367	12/8/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Deadhorse Precision & Bias Goals
C-368	12/9/2009	Email and attachment from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding Deadhorse Precision & Bias Goals with spreadsheet data
C-369	12/9/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Deadhorse Precision & Bias Goals (without attachment; see attachment in 1/9/09 email from Christopher Hall, EPA Region 10 to Thomas Damiana, AECOM)
C-370	12/9/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Revision 01 – Deadhorse October through November 2009 Monitoring
C-371	12/9/2009 Folder	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Deadhorse Precision & Bias (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-371)
C-372	12/9/2009	Email from Pat Nair, EPA to Rodger Steen, Air Sciences, regarding Change in Emissions Units
C-373	12/10/2009	E-mail from Rodger Steen, Air Sciences, to Pat Nair, EPA, regarding Info on New Engines

November 14, 2011 Page 123 of 197

EPA		
Exhibit	Data	Dogument Description
Number C-374	Date 12/10/2009 Folder	Document Description Email and attachments from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM,. regarding Deadhorse Precision and Bias Goals (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-374)
C-375	12/11/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding Info on New Engines
C-376	12/11/2009 Folder	E-mail from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding Cementing and Logging Engines (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-376)
C-377	12/11/2009	Memorandum from Julie Vergeront, EPA Region 10, regarding Conversation with Kirk Lilley, Shell, re: Anchor Setting
C-378	12/13/2009	E-mail from Mark Schindler, Octane, to Janis Hastings, EPA Region 10, regarding Supplemental CD
C-379	12/14/2009 Folder	E-mail from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding Preliminary Draft of El – Discoverer Chukchi Sea Permit (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-379)
C-380	12/14/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, re: Tuesday Meeting
C-381	12/15/2009 Folder	E-mail from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding Almost Final El for Chukchi Permit Attached (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-381)
C-382	12/15/2009	Email from Herman Wong, EPA Region 10, to Thomas Damiana, AECOM, re: Deadhorse October through November Monitoring Summary
C-383	12/16/2009 Folder	E-mail from Thomas Damiana, AECOM, to Chris Hall, EPA Region 10, regarding Final Deadhorse QAPP (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-383)

November 14, 2011 Page 124 of 197

EPA Exhibit		
Number	Date	Document Description
C-384	12/16/2009	E-mail from Thomas Damiana, AECOM, to Chris Hall, EPA Region 10, regarding RLSO version of the Deadhorse QAPP
C-385	12/17/2009	Email from Chris Hall, EPA to Thomas Damiana, AECOM regarding Nuiqsut Data (without attachment; see attachment to 6/17/09 email from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM)
C-386	12/17/2009	E-mail from Chris Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding Wainwright QAPP(s)?
C-387	12/17/2009	E-mail from Thomas Damiana, AECOM to Chris Hall, EPA Region 10, regarding Help with your questions
C-388	12/17/2009 Folder	E-mail from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding El Finalizing Icebreaker #1 (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-388)
C-389	12/18/2009	E-mail from Christopher Hall, EPA to Thomas Damiana, AECOM regarding Deadhorse October November report revision 1 questions (I can get you mote informal numbers)
C-390	12/18/2009	E-mail from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding EPA Approval for the Deadhorse QAPP
C-391	12/18/2009	E-mail from Christopher Hall, EPA Region 10, to Thomas Damiana, AECOM, regarding Deadhorse October November report revision 1 questions (Thanks for the quick reply)
C-392	12/18/2009	E-mail from Thomas Damiana, AECOM to Chris Hall, EPA regarding Nuiqsut data
C-393	12/18/2009	Email from Thomas Damiana, AECOM to Christopher Hall, EPA regarding Wainwright QAPP(s)?
C-394	12/21/2009	E-mail from Herman Wong, EPA Region 10, to Christopher Hall, EPA Region 10, re: Evaluation of Deadhorse data; 23 OCT 2009 to 29 NOV 2009
C-395	12/22/2009 Folder	E-mail from Eric Hansen, ENVIRON, to Paul Boys, EPA, regarding Supplemental BACT analyses for CO emissions from MLC and logging wench engines (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\C-395)

November 14, 2011 Page 125 of 197

EPA		
Exhibit	Data	Dogument Description
Number C-396	Date 12/22/2009 Folder	Document Description E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Revision 02 – Deadhorse October through November 2009 Monitoring Summary. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-396)
C-397	12/23/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Comments to date on Deadhorse QAPP
C-398	12/23/2009	E-mail from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding Attached El for Chukchi
C-399	12/23/2009	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, regarding Wainwright Near-Term Monitoring Flow Checks
C-400	12/23/2009 Folder	E-mail from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10,regarding Nuiqsut data (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\C-400)
C-401	12/24/2009	E-mail from Herman Wong, EPA Region 10, to Christopher Hall, EPA Region 10, Re: Revision 2; Evaluation of Deadhorse Data from 23 Oct 2009 to 29 Nov 2009
C-402	12/24/2009	E-mail from Eric Hansen, ENVIRON, to Paul Boys, EPA, regarding Supplemental BACT analyses for CO emissions from MLC and logging winch engines (with attachment: <i>Airborne Toxic Control Measure for Stationary Compression-Ignition Engines</i> , CA EPA Air Resources Board. September 2003.)
C-403	12/28/2009	Email from Mark Schindler, Octane, to Natasha Greaves, EPA, re: EPA/Shell Meeting Time and Date [1] (Do this on the 5 th ?)
C-404	12/28/09	Email from Mark Schindler, Octane, to Natasha Greaves, EPA, re: EPA/Shell Meeting Time and Date [2] (This sounds great)
C-405	12/28/2009	E-mail from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, regarding Meteorological Data Scanning and Validating (MSV) Program
C-406	12/28/2009	E-mail from Rodger Steen, Air Sciences to Pat Nair, EPA regarding Compliance Tracking for Ice Management and Nanuq

November 14, 2011 Page 126 of 197

EPA Exhibit		
Number	Date	Document Description
C-407	12/30/2009 Folder	E-mail from Thomas Damiana, AECOM to Herman Wong, EPA Region 10, regarding Deadhorse December 2009 Monitoring Summary. (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-407)
C-408	1/4/2010 Folder	E-mail from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding Attached Chukchi El (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\C-408)
C-409	1/4/2010	Letter from Peter Slaiby, Shell, to Gina McCarthy, EPA, Re: The meeting in mid-December to mobilize the 2010 drilling season
C-410	1/5/2010 Folder	E-mail from Pat Nair, EPA, to Rodger Steen, Air Sciences, regarding Attached El (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C – Correspondence and Communication between EPA and Shell\ C-410)
C-411	1/5/2010	E-mail from Rodger Steen, Air Sciences, to Pat Nair, EPA, regarding Viking annual NOx emission factor to be used in inventory
C-412	1/5/2010	Email from Jan Hastings, EPA, to Michelle Pirzadeh, EPA, re: Background Information for the Shell/EPA January 6, 2010 (redacted) Att. 1: 1/4/10 Letter from Peter Slaiby, Shell, to Gina McCarthy, re: Discussion in Order to Mobilize for 2010 Drilling Season Att. 2: Shell Chukchi OCS/PSD Permit Chronology and Completeness of Supplemental BACT Documents
C-413	1/6/2010	Shell and EPA R10 January 6, 2010 Meeting, Seattle, WA, Chukchi and Beaufort Sea PSD Permit Applications, Summary and Notes (EPA's Agenda and Attendee List is Attached)
C-414	1/6/2010	EPA Meeting Agenda – Shell Beaufort OCS/PSD Permit Application
C-415	1/8/2010	Email from Mark Schindler, Octane, to Janis Hastings, Region 10 EPA, Re: EPA proposes new modified air quality permit to Shell Gulf of Mexico, Chukchi Sea, Alaska
C-416	1/8/2010	Email from Eric Hansen, Environ, to Mark Schindler, Octane, and Janis Hastings, Region 10 EPA, Re: BACT

November 14, 2011 Page 127 of 197

EPA Exhibit		
Number	Date	Document Description
C-417	1/11/2010 Folder	E-mail from Thomas Damiana, AECOM to Herman Wong, EPA Region 10, regarding Wainwright Fourth Monitoring Quarter 2009 Data Summary (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-417)
C-418	1/11/2010 Folder	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, RE: Wainwright Near_Term November and December 2009 Prelim Data Summary with attachments (Attachments 2 and 3 not printed. Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-418)
C-419	1/11/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, re: Deadhorse Sampling Frequency
C-420	1/19/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, Region 10 EPA, Re: Deadhorse Sampling Frequency
C-421	1/20/2010	Email from Christopher Hall, Region 10 EPA, to Thomas Damiana, AECom, Re: Working Request Through OAQPS for Deadhorse Sampling Frequency
C-422	1/20/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, Region 10 EPA, Re: Deadhorse Sampling Frequency
C-423	1/26/2010	Email from Christopher Hall, Region 10 EPA, to Thomas Damiana, AECOM, Re: Deadhorse Sampling Schedule
C-424	1/26/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, Region 10 EPA, Re: Thoughts on Deadhorse Sampling Schedule (without attachment; see attachment with 1/6/2010 email from Thomas Damiana, AECOM, to Christopher Hall, EPA Region 10, in Section CC)
C-425	1/29/2010	Letter from Gina McCarthy, EPA, to Peter Slaiby, Shell, Re: Response to Shell's letter dated January 4, 2010
C-426	2/4/2010	Email from Eric Hansen, Environ, to Paul Boys, EPA, Re: Shell Beaufort Sea Application – BACT Clarification (redacted)
C-427	2/7/2010	Test Plan for Shell Gulf of Mexico, Inc. Frontier Discoverer Drillship Chukchi Sea Exploration Drilling Program PSD Permit No. R10OCS/PSD-AK-09-01 (Initial Compliance Testing 2010)

November 14, 2011 Page 128 of 197

EPA Exhibit		
Number	Date	Document Description
C-428	2/8/2010	Memorandum fro Kristi Smith, EPA, to Julie Vergeront, EPA Region 10, RE: Meeting with Shell Attorneys Regarding the Chukchi and Beaufort OCS/PSD permits
C-429	2/9/2010	E-mail from John Iani, on behalf of Shell, to Dave Bray, EPA Region 10, re: Fw
C-430	2/10/2010	E-mail from Mark Schindler, Octane, to Dave Bray, EPA Region 10, re: Agenda and Decision
C-431	2/12/2010	Email from Jan Hastings, EPA Region 10, to Pat Nair, EPA, re: No Meeting with Shell Next Week
C-432	2/24/2010	Shell Meeting Notes, Re: BACT requirements, Testing for crane engines, and other stack testing
C-433	3/1/2010	Email from Thomas Damiana, AECom, to Christopher Hall, Region 10 EPA, Re: Deadhorse Sampling Frequency
C-434	3/1/2010	Email from Christopher Hall, Region 10 EPA, to Thomas Damiana, AECom, Re: Deadhorse Sampling Frequency
C-435	3/3/10	Email from Julie Vergeront, EPA Region 10, to Julie Vergeront, EPA Region 10, forwarding Email from Janet McCabe, EPA, to Sara Glen, Shell, Re: FW: Sara/Janet 2:00 will work
C-436	3/9/2010	Email from Christopher Hall, Region 10 EPA, to Thomas Damiana, AECOM, Re: Wainwright Data
C-437	3/12/2010	Email from Christopher Hall, Region 10 EPA, to Thomas Damiana, AECOM, Re: Wainwright Data Draft to be Released
C-438	3/12/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, Region 10 EPA, Wainwright Data
C-439	3/12/2010 Folder	Email and Attachments from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, Wainwright Near-Term September, November and December 2009 Monthly Preliminary Data Summary. Attachments 2-4 not printed (Attachments can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-439)

November 14, 2011 Page 129 of 197

EPA Exhibit Number	Date	Document Description
C-440	3/13/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, Region 10 EPA, Re: Wainwright data
C-441	3/13/2010	Email from Kirk Lilley, Shell, to Julie Vergeront, Region 10 EPA, Re: FW: Source Test
C-442	3/15/2010	Email from Herman Wong, Region 10 EPA, to Kirk Winges, ENVIRON, Re: Fw: Call with Environ re: VISCREEN
C-443	3/26/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, RE: Report and Data Distribution and PM 2.5
C-444	3/30/2010	Email from Thomas Damiana, AECOM, to Herman Wong, Region 10 EPA, Re: Wainwright Permanent Station Q4 Monitoring Report with attachments
C-445	3/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, Region 10 EPA, Re: Wainwright Permanent Station Q4 2009 Monitoring Report (Attachments to this email included with Exhibit C-442)
C-446	3/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, Region 10 EPA, Re: Wainwright Near-Term Annual Data Summary (Attachment 2 not printed. Attachment can be found on the Chukchi Administrative Record Compact Disc at the following file path: C - Correspondence and Communication between EPA and Shell\ C-446)

Return to Section C

Return to Table of Contents

November 14, 2011 Page 130 of 197

Section CC: Correspondence and Communication between EPA and Shell (including Shell contractors) (cont.)

contractors) (cont.)		
EPA Exhibit Number	Date	Document Title
Nullibei	Date	Document The
CC-1	10/20/2008	Email from Wayne Wooster, ASRC Energy, to Herman Wong, re: MMS/EPA Shell Beaufort Sea Met Meeting/Teleconference
CC-2	10/21/2008	Email from Susan Childs, Shell, to Herman Wong, EPA, Subject: MMS-EPA-Shell Beaufort Sea Met Monitoring Meeting- Teleconference
CC-3	11/4/2008	Email from Susan Childs, Shell, to Herman Wong, EPA Region 10, Subject: Beaufort Buoy Data Collection
CC-4	1/2/2009	Email from Nicole St. Amand for Susan Childs, Shell, to Rick Albright, EPA, re: Shell Letter to EPA RE: Notice of Intent to Submit a Preconstruction Permit Application for the Frontier Discoverer Beaufort Sea Exploratory Drilling Program Att. 1: Shell letter to EPA with Letter of Intent
CC-5	1/21/2009	Email from Tim Martin to Pat Nair Re: Beaufort Sea Meteorological Stations
CC-6	1/29/2009	Email from Herman Wong, EPA, to Mark Schindler, Octane, re: Meteorological and Air Quality Data Collection Programs Representative of the Beaufort Sea
CC-7	3/17/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA Region 10, Subject: UAF Beaufort Coast Offshore Data Collection Planned for Spring/Summer 2009
CC-8	5/22/2009	Email from Eric Hansen, Environ, to Dave Bray and Natasha Greaves, EPA, re: Beaufort OCS Air Quality Control Region
CC-9	5/29/2009	Outer Continental Shelf Pre-Construction Air Permit Application, Frontier Discoverer Beaufort Sea Exploration Drilling Program
CC-10	5/29/2009	Letter from Susan Childs, Shell Offshore Inc., to Janis Hastings, EPA, re: Preconstruction Permit Application for Frontier Discoverer Drill Vessel in Beaufort Sea, Alaska
CC-11	6/03/2009	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Six Additional Copies of Shell Beaufort Sea Air Permit Application
CC-12	6/04/2009	Email from Eric Hansen, Environ, to Natasha Greaves, EPA, to re: Shell Beaufort Sea Air Permit Application – Electronic Copy (See Exhibit CC-9 for attachment)

Page 131 of 197 November 14, 2011

EPA		
Exhibit Number	Date	Document Title
CC-13	6/04/2009	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Shell Beaufort Sea Air Permit Application – Electronic Copy (Thanks for the PDF of the permit application)
CC-14	6/08/2009	Email from Eric Hansen, ENVIRON to Natasha Greaves, Region 10 EPA, Re: Beaufort Review
CC-15	6/24/2009	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Beaufort OCS Permit Application Lease Blocks
CC-16	6/26/2009	Email from Caren Mathis, ASRC, to Jan Hastings, EPA, re: 2010 Camden Bay EP
CC-17	7/23/2009	Email from Natasha Greaves, EPA, to Eric Hansen, re: Incompleteness Determination to Shell Att. A: EPA Air Quality Impact Analysis Comments
CC-18	7/24/2009	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Incompleteness Determination and Draft Attachment A to EPA's Partial Incompleteness Determination Letter
CC-19	7/24/2009	Email from Eric Hansen, Environ, to Natasha Greaves, EPA, re: Request for a Word Version of EPA's Partial Incompleteness Determination Letter Att. 1: Letter (unsigned) from Rick Albright, EPA, to Susan Childs, Shell Offshore Inc., re: Partial Incompleteness Determination Att. 2: EPA Air Quality Impact Analysis Comments (Att. A)
CC-20	7/30/2009	Email from Natasha Greaves, EPA, to Kirk Winges, Environ, re: Partial Incompleteness Determination Att. 1: 7/29/09 Letter from Rick Albright, EPA, to Susan Childs, Shell Offshore Inc., re: Partial Incompleteness Determination Att. 2: EPA Air Quality Impact Analysis Comments (Att. A)
CC-21	7/31/2009	Email from Kirk Winges, Environ, to Natasha Greaves, EPA, re: Word Version of EPA's Partial Incompleteness Determination Letter Att. 1: Letter from Rick Albright, EPA, to Susan Childs, Shell Offshore Inc., re: Partial Incompleteness Determination Att. 2: EPA Air Quality Impact Analysis Comments (Att. A)
CC-22	8/17/2009	Email from Kirk Winges, ENVIRON, to Herman Wong, Region 10 EPA, Re: Regional Emission Inventory Attachment from Kirk Winges, ENVIRON, Re: Table Only
CC-23	8/17/2009	Email from Herman Wong, Region 10 EPA to Alan Schuler, Re: ADEC Verification

November 14, 2011 Page 132 of 197

EPA Exhibit	Data	Do como ent Title
Number CC-24	Date 8/21/2009	Document Title Letter from Susan Childs, Shell Offshore, Inc., to Richard Albright, EPA, re: Partial Incompleteness Letter Response Att. 1: Responses to EPA July 29, 2009 Incompleteness Letter Att. 2: Technical Memorandum: Discoverer Chukchi Application – Regulated Non-Criteria Air Pollutants
CC-25	8/21/2009	Email from Eric Hansen, ENVIRON, to Rick Albright, EPA, Re: Response to Partial Incompleteness Letter for SOI Beaufort Sea Application.
CC-26	8/23/2009	Email from Janis Hastings, EPA, to Natasha Greaves, EPA, re: Shell Letter to EPA Regarding Response to EPA's Partial Incompleteness Letter Att. 1: 6/16/09 Technical Memorandum: Discoverer Chukchi Application – Regulated Non-Criteria Air Pollutants Att. 2: August 21, 2009 Letter from Susan Childs, Shell Offshore, Inc., to Richard Albright, EPA, re: Partial Incompleteness Letter Response Att. 3: Responses to EPA July 29, 2009 Incompleteness Letter
CC-27	8/24/2009	Email from Herman Wong, Region 10 EPA to Juliane Matthews, Julie Vergeront, Nancy Helm, and Janis Hastings, Region 10 EPA, Re: FW: 9 April 2008 Conference Call with AK and MMS-AK
CC-28	8/25/2009	Email from Herman Wong, Region 10 EPA to Alan Schuler, DEC, Re: Liberty Ambient Pollutant Data Attachment from Herman Wong, Region 10 EPA, Re: Liberty Ambient Endicott Findings Report
CC-29	8/25/2009	Email from Thomas Damiana, AEC, to Herman Wong, Region 10 EPA, Re: Badami Station Commissioning
CC-30	8/26/2009	Email from Thomas Damiana, ADEC, to Herman Wong, Region 10 EPA, Re; @ Badami – North Slope Particulate Summary
CC-31	8/26/2009	Email from Thomas Damiana, AECOM regarding North Slope Particulate Summary (with spreadsheet data)
CC-32	8/26/2009	Email from Christopher Hall, Region 10 EPA, to Thomas Damiana, AEC, Re: FW: Shell Badami Monitoring – Installation Audit

November 14, 2011 Page 133 of 197

EPA Exhibit		
Number	Date	Document Title
CC-33	8/27/2009	Email from Herman Wong, Region 10 EPA to Natasha Greaves, Region 10 EPA, Re: FW: From Alan Schuler, DEC, ADEC Verification of Shell Regional Inventory Attachment 1 from Herman Wong, Region 10 EPA, Re: ADEC Verification Table Only Attachment 2 from Herman Wong, Region 10 EPA, Re: ADEC Verification POT G4 PH 10.95 Attachment 3 from Herman Wong, Region 10 EPA, Re: ADEC Verification Actual G4 PM10.95
CC-34	9/02/2009	Email from Herman Wong, Region 10 EPA to Alan Schuler, ADEC, Re: Shell Beaufort Sea OCS PSD Application; Absolute Final AIA Completeness Determination & Information and Data Request Attachment 1 from Herman Wong, Region 10 EPA, Re: Shell Beaufort Sea OCS R10-OCS + PSD Increment Baseline Approach Attachment 2 from Herman Wong, Region 10 EPA, Re: Shell Beaufort Sea ADEC Verification of Shell GT Attachment 3 from Herman Wong, Region 10 EPA, Re: Shell Beaufort OCS Information + Data Request
CC-35	09/04/2009	Email from Jan Hastings, EPA, to Susan Childs, Shell Offshore Inc., re: Beaufort Sea Incompleteness Determination Att. 1: Letter from Jan Hastings, EPA, to Susan Childs, Shell Offshore Inc., re: EPA Beaufort Sea Incompleteness Letter Att. 2: Air Quality Impact Analysis Comments (Att. A) Att.3: July 2, 2009 Memo from Dave Bray, EPA, to Rick Albright, EPA, and Janis Hastings, EPA re: Implementing PSD Baseline Dates, Baseline Areas, and Baseline Concentrations on the Outer Continental Shelf in Alaska Att. 4: Email string between Alan Schuler, ADEC, and Herman Wong, EPA, Kirk Winges, Environ, et al, re: ADEC Verification of Shell Regional Inventory
CC-36	9/04/2009	Email from Eric Hansen, Environ, to Natasha Greaves, EPA, re: Beaufort Sea Incompleteness Determination Att. 1: Letter from Rick Albright, EPA, to Susan Childs, Shell Offshore Inc., re: Incompleteness Determination Att. 2: Air Quality Analysis Comments (Att. A)
CC-37	9/14/2009	Email from Herman Wong, EPA, to Natasha Greaves, EPA, re: Shell Beaufort Sea OCS/PSD Application: Air Quality Impact Analysis Minutes of 09-08-09 Meeting
CC-38	9/14/2009	Email from Dave Bray, EPA Region 10, to Herman Wong, EPA Region 10, Re: Application; AQIA Minutes of 08 September 2009 Meeting

November 14, 2011 Page 134 of 197

EPA Exhibit Number	Date	Document Title
CC-39	9/17/2009	Email from Scott Winges, Shell, to Herman Wong, Region 10 EPA, Re: Regional Emissions for Short Term PM10 and SO2
CC-40	9/18/2009	Email from Alan Schuler, DEC, to Scott Winges, Shell, and Herman Wong, Region 10 EPA, Re: Regional Emissions for Short Term PM10 and SO2
CC-41	9/23/2009	Email from Alan Schuler, DEC, to Eric Hansen, Shell, Re: FW: BPX North Slope PM10 Data Attachment: CCP Site PM10
CC-42	9/23/2009	Email from Natasha Greaves, EPA, to Dave Bray, Julie Vergeront, Juliane Matthews, Pat Nair, Doug Hardesty, Nancy Helm, and Herman Wong, EPA, Re: FW: NSR Implications of the PM2.5 Standard Attachment: New Source Review Implications of the PM2.5 Ambient Air Quality Standards
CC-43	9/24/2009	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: National Park Service (NPS) and National Forest Service (NFS) Contacts
CC-44	9/30/2009	Prepared for Shell Offshore Inc.: Outer Continental Shelf Pre- Construction Air Permit Application and Appendices, Frontier Discoverer Beaufort Sea Exploration Drilling Program
CC-45	10/01/2009	Email from Eric Hansen, Shell, to Dave Bray and Natasha Greaves, Region 10 EPA, Re; Revised BNateaufort Sea Application
CC-46	10/02/2009	Email from Eric Hansen, Environ, to Natasha Greaves, EPA, re: PDF of Revised Beaufort Sea Permit
CC-47	10/02/2009	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Revised Beaufort Sea Permit
CC-48	10/07/2009	Email from Janis Hastings, EPA, to Mark Schindler, Octane, re: PDF of Revised Beaufort Sea Permit Application
CC-49	10/07/2009	Email from Mark Schindler, Octane, to Janis Hastings, EPA, Re: PDF copy of revised Beaufort Permit Application
CC-50	10/13/2009	Email from Janis Hastings, EPA, to Mark Schindler, Octane, re: PDF of Revised Beaufort Sea Permit and Meeting

November 14, 2011 Page 135 of 197

EPA Exhibit Number	Data	Document Title
Nullibel	Date	
CC-51	10/13/2009	Email from Natasha Greaves, EPA, to Eric Hansen, ENVIRON, Re: SOI Beaufort Sea PSD permit application
CC-52	10/19/2009	Email from Janis Hastings, EPA, to Mark Schindler, Octane, re: PDF of Revised Beaufort Sea Permit and Meeting
CC-53	10/27/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Re: Badami Data
CC-54	10/28/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, Re: Badami Data
CC-55	10/30/09	Email from Herman Wong, Region 10 EPA, to Kirk Winges, ENVIRON, Re: Shell Beaufort Sea PSD Application; Request for Conference Call
CC-56	11/03/2009	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA, Re: Road Map
CC-57	11/04/2009	Email from Herman Wong, EPA, to Natasha Greaves, EPA, re: Road Map (Errata Sheet) Att. 1: Letter from Richard Albright, EPA, to Susan Childs, Shell Offshore Inc., re: Incompleteness Determination
CC-58	11/05/2009	Email from Mark Schindler, Octane, to Janis Hastings, EPA, Re: Badami Reports
CC-59	11/06/2009	Email from Janis Hastings, EPA, to Mark Schindler, Octane, re: Beaufort Permit Letter Att. 1: Letter from Richard Albright, EPA, to Susan Childs, Shell Offshore Inc., re: Shell Offshore Inc. September 30, 2009 Revised PSD Permit Application for Frontier Discoverer Drill Vessel in the Beaufort Sea
CC-60	11/09/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Re: Badami Particulate Data
CC-61	11/09/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, Re: Badami Protocol Attachment: Anser Monitoring Station Location Map
CC-62	11/09/2009	Email from Mark Schindler, Octane, to Janis Hastings, EPA, Re: FWD: Badami Particulate Data

November 14, 2011 Page 136 of 197

EPA Exhibit		
Number	Date	Document Title
CC-63	11/13/2009	Email from Linsey DeBell, AECOM, to Chris Hall, EPA regarding Nuiqsut PM2.5 Data
CC-64	11/13/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, Re: Badami Particulate Data
CC-65	11/13/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, Re: Badami Monitoring Station Quarterly Report (1)
CC-66	11/13/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, Re: Badami Monitoring Station Quarterly Report (2)
CC-67	11/13/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, Re: Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report (1)
CC-68	11/13/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, Re: Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report (2)
CC-69	11/23/2009	Email from Mary Portanova, EPA, to Juliane Matthews, EPA, Re: Fw for Record: Shell Short-term Issues
CC-70	11/24/2009	Letter from Eric Hodek, AECOM, to Nicole St. Amand, Shell, Re: October 2009 Data Summary with Attachment of Monthly Data Summaries
CC-71	11/25/2009	Letter from Thomas Damiana, AECOM, to Christopher Hall, EPA, Re: Badami Ambient Air Quality and Meteorological Monitoring Program QAPP Revision 01-Precision and Bias Assessment of PM2.5 Using a Collocated Network Sample
CC-72	11/25/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Re: Revision to the Badami QAPP
CC-73	11/26/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, Re: [TRANSFER REMINDER] Badami Monitoring Station Quarterly Report (1)
CC-74	11/26/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, Re: [TRANSFER REMINDER] Badami Monitoring Station Quarterly Report (2)
CC-75	11/26/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, Re: [TRANSFER REMINDER] Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report (1)

November 14, 2011 Page 137 of 197

EPA Exhibit Number	Date	Document Title
CC-76	11/26/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, Re: [TRANSFER REMINDER] Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report (2)
CC-77	12/03/2009	Email from Nicole St Amand, Shell, to Janis Hastings, EPA, Re: FW: Badami Monthly Report with Attached October 2009 Badami Data Summary
CC-78	12/03/2009	Email from Eric Hodek, AECOM, to Herman Wong, EPA, Re: Badami Monthly Report Attachment: Badami October 2009 Summary
CC-79	12/04/2009	Email from Janis Hastings, EPA, to Christopher Hall and Mary Portanova, EPA, Re: Badami Monthly Report (without attachment; see attachment on 12/03/09 email from Eric Hodek, AECOM, to Herman Wong, EPA)
CC-80	12/10/09	Email from Steve Mackey, Hoefler Consulting Group, to Christopher Hall, EPA, Re; 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-81	12/10/2009	Email from Steve Mackey, Hoefler Consulting Group, to Christopher Hall, Region 10 EPA, Re: Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-82	12/11/2009	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler Consulting Group, Re: 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-83	12/11/2009	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler Consulting Group, Re: 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK (Quick question)
CC-84	12/11/2009	Email from Steve Mackey, Hoefler Consulting Group, to Christopher Hall, EPA, Re: 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-85	12/14/2009	Email from Janis Hastings, EPA, to Pat Nair, Natasha Greaves, Juliane Matthews, Julie Vergeront, Dave Bray, Mary Portanova, and Christopher Hall, EPA, Re:Badami November Report Attachment: Letter from Eric Hodek, AECOM, to Nicole St. Amand, Shell, Re: November 2009 Badami Data Summary
CC-86	12/21/2009	Email from Mary Portanova, EPA, to Juliane Matthews, EPA, forwarded from Kirk Winges, ENVIRON, Re: FW for the Record: Modeling Files with Attachment
CC-87	12/22/2009	Email from Eric Hodek, AECOM, to Janis Hastings, EPA, Re: Badami Monitoring Report with attached report

November 14, 2011 Page 138 of 197

EPA Exhibit		
Number	Date	Document Title
CC-88	12/22/2009	Email from Janis Hastings, EPA, to Mary Portanova, Juliane Matthews, Christopher Hall, Natasha Greaves and Dave Bray, EPA, Re: FW: from Eric Hodek, AECOM, Badami Monitoring Report
CC-89	12/30/2009	Email from Mark Schindler, Octane, to Natasha Greaves, EPA, re: EPA/Shell Meeting Time and Date
CC-90	1/06/2010	Email from Thomas Damiana, AEC, to Christopher Hall, EPA, Re: Badami QAPP Revision 2
CC-91	1/06/2010	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, Re: Badami 4 Months Report
CC-92	1/07/2010	Email from Janis Hastings, EPA, to Mark Schindler, Octane, Re: Check-in Tomorrow Attachment 1:Fw: Part 3 Attachment List 8 30 Attachment 2: Fw: Part 3 Attachment A Attachment 3: Fw: Part 3 Attachment C – Suydam Declaration Attachment 4: Fw: Part 3 Attachment C – Wernham Declaration Attachment 5: NSB Comment Shell 2010 EP Camden Bay
CC-93	1/07/2010	Email from Janis Hastings, EPA, to Natasha Greaves, Juliane Matthews, Dave Bray, and Dan Brown, EPA, Re: Fw: 2009_0831_1805_NB_Comment Shell 2010 EP Camden Bay Attachment: FW Email 143 NSB Attachments to 2010 Camden Bay EP-EIA
CC-94	1/07/2010	Email from Christopher Hall, EPA, to Eric Hodek, AECOM, Re: Badami Hourly Data
CC-95	1/11/2010	Email from Janis Hastings, EPA, to Mark Schindler, Octane, Re: Got Your Message
CC-96	1/13/2010	Email from Susan Childs, Shell, to Janis Hastings, EPA, Re: Beaufort PSD Update Materials Attachment 1: Letter from Susan Childs, Shell, to Janis Hastings, EPA, Re: Updated commitments for Frontier Discoverer Drill Vessel in Beaufort Sea, Alaska Attachment 2: Changes to be Incorporated in Re-Submittal of Beaufort Sea Permit Application
CC-97	01/13/2010	Email from Natasha Greaves, EPA, to Kirk Winges, Environ, re: Access to File Transfer Portal at ENVIRON Corp.

November 14, 2011 Page 139 of 197

EPA Exhibit		
Number	Date	Document Title
CC-98	01/13/2010	Email from Eric Hansen, Environ, to Natasha Greaves, EPA, re: Lease Blocks
CC-99	01/13/2010	Email from Eric Hansen, Environ, to Natasha Greaves, EPA, re: PDF of Permit Application Att. 1: Powerpoint: Preparing PDFs for the Web
CC-100	01/13/2010	Letter from Susan Childs, Shell Offshore Inc. to Janis Hastings, EPA, re: Updated Commitments for Frontier Discoverer Drill Vessel in Beaufort Sea, Alaska Att. 1: Changes to be Incorporated in Re-Submittal of Beaufort Sea Permit Application
CC-101	1/13/2010	Email from Kirk Winges, Environ, to Dave Bray, Region 10 EPA, Re: Files have been uploaded for you
CC-102	1/13/2010	Email from Kirk Winges, Environ, to Janis Hastings, Region 10 EPA, Re: Files Have Been Uploaded for You
CC-103	1/13/2010	Email from Mary Portanova, USEPA, to Juliane Matthews, Region 10 EPA, Re: Fw: from Kirk Winges, Environ, For Record: Files Have Been Uploaded for You
CC-104	1/14/2010	Email from Juliane Matthews, EPA, to Mary Portanova, Herman Wong, Dave Bray, Natasha Greaves, Christopher Hall, Paul Boys, Nancy Helm, and Julie Vergeront, EPA, Re: FW: Beaufort PSD Update Materials Attachment 1: Letter from Susan Childs, Shell, to Janis Hastings, EPA, Re: Updated Commitments for Frontier Discoverer Drill Vessel in Beaufort Sea, Alaska Attachment 2: Changes to be Incorporated in Re-submittal of Beaufort Sea Permit Application
CC-105	1/14/2010	Email from Thomas Damiana, AEC, to Christopher Hall, EPA, Re. Badami Raw Data
CC-106	1/14/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AEC, Re: Badami Raw Data
CC-107	1/14/2010	Email from Eric Hodek, AECOM, to Herman Wong and Christopher Hall, Region 10 EPA, Re: Updated Data Spreadsheet for Submitted to EPA/Shell
CC-108	1/15/2010	Email from Thomas Damiana, AEC, to Christopher Hall, Region 10 EPA, Re: R10 Comments on the Badami QAPP Revision 2

November 14, 2011 Page 140 of 197

EPA Exhibit Number	Date	Document Title
CC-109	1/18/2010	Email from Eric Hansen, Environ, to Janis Hastings, EPA, re: Submittal of Permit Application Delivery [1] Att. 1: Date corrected letter of 1/18/10 from Susan Childs, Shell Offshore Inc., to Richard Albright, EPA, re: Permit Application (Revised) for Frontier Discoverer Drill Vessel in Beaufort Sea Att. 2: 1/18/09: Letter from Susan Childs, Shell Offshore Inc., to Richard Albright, EPA, re: Permit Application (Revised) for Frontier Discoverer Drill Vessel in Beaufort Sea Att. 3: Outer Continental Shelf Pre-Construction Air Permit Application and Appendices
CC-110	1/18/2010	Email from Dave Bray, EPA, to Eric Hansen, Environ, re: Delivery
CC-111	1/19/2010	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Delivery
CC-112	1/19/2010	Email from Mary Portanova, EPA, to Kirk Winges, Environ, Re: Shell Beaufort
CC-113	1/19/2010	Email from Thomas Damiana, AEC, to Christopher Hall, EPA, Re: R10 Comments on the Badami QAPP Revision 2
CC-114	1/20/2010	Email from Kirk Winges, Environ, to Eric Hansen, Shell, Re: Revised Spreadsheet Attachment 1:Appendix A (Revised January 5, 2010) Attachment 2: Appendix A (Revised January 5, 2010)
CC-115	1/20/2010	Email from Natasha Greaves, EPA, to Kirk Winges, Environ, re: Shell Beaufort Sea PSD Permit Application Figure 1-1
CC-116	1/20/2010	Email from Scott Winges, Environ, to Natasha Greaves, EPA, re: Shell Beaufort Sea PSD Permit Application [See email and attachment from 1/18/10 from Eric Hansen]
CC-117	1/20/2010	Email from Natasha Greaves, EPA, to Scott Winges, ENVIRON, Re: Shell Beaufort Sea PSD Permit Application Figure 1-1 [For attachment, see email from 1/18/10 from Eric Hansen, Exhibit CC-109]

November 14, 2011 Page 141 of 197

EPA Exhibit Number	Date	Document Title
CC-118	1/20/2010	Email from Kirk Winges, ENVIRON, to Eric Hansen, ENVIRON, Mark Schindler, Octane, Scott Winges, ENVIRON, Susan Childs, Shell, Kirk Lilley, Shell, Dave Bray, EPA, Natasha Greaves, EPA and Janis Hastings, EPA, Re: Revised Spreadsheet (Attached is a new version of Appendix A spreadsheet that should help in your review of the application) [See email and attachment of 1/20/10 from Kirk Winges]
CC-119	1/21/2010	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Additional Copies
CC-120	1/21/2010	Email from Natasha Greaves, EPA, to Mark Schindler, Octane, re: Table of Contents with Link to Part 55 Consistency Updates for Alaska, January 21, 2010
CC-121	1/21/2010	Email from Thomas Damiana, AEC, to Christopher Hall, EPA, Re: FW: R10 Comments on the Badami QAPP Revision 2
CC-122	1/21/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AEC, Re: Badami PM2.5 Data Question
CC-123	1/21/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AEC, Re: FW: R10 Comments on the Badami QAPP Revision 2
CC-124	1/22/2010	Email from Janis Hastings, EPA, to Mark Schindler, Octane, Re: Got your message
CC-125	1/25/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Re: R10 Comments on the Badami QAPP Revision 2
CC-126	1/26/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, Re: R10 Comments on the Badami QAPP Revision 2
CC-127	1/27/2010	Email from Natasha Graves, EPA, to Scott Winges, Environ, re: Request for Copies of Permit Application and Modeling File CDs
CC-128	1/28/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Badami PM 2.5 Data Question
CC-129	1/29/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, Re: Badami Report

November 14, 2011 Page 142 of 197

EPA Exhibit Number	Date	Document Title
Nullioei	Date	
CC-130	2/02/2010	Email from Eric Hansen, Environ, to Natasha Greaves, EPA, re: PSD Contact List
CC-131	2/05/2010	Email from Eric Hansen, ENVIRON, to Janis Hastings, Natasha Greaves and Dave Bray, EPA, Re: More Copies
CC-132	2/05/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, Re: FW: R10 comments on Badami QAPP Revision 2
CC-133	2/05/2010	Email from Mary Portanova, USEPA, to Juliane Matthews, Region 10 EPA, Re:FW: from Kirk Winges for Record: Shell Beaufort [1]
CC-134	2/05/2010	Email from Kirk Winges, Environ, to Mary Portanova, USEPA, Re: Shell Beaufort [2]
CC-135	2/05/2010	Email from Kirk Winges, Environ, to Mary Portanova, USEPA, Re: Shell Beaufort [3]
CC-136	2/05/2010	Email from Mary Portanova, USEPA, to Juliane Matthews, Region 10 EPA, Re: FW; from Kirk Winges, Environ, re For Record: Shell Beaufort [4]
CC-137	2/5/2010	Email from Mary Portanova, EAP, to Juliane Matthews, EPA, Re: Fw for Record: Shell Beaufort-Nuiqsut [5]
CC-138	2/08/2010	Email from Mary Portanova, USEPA, to Juliane Matthews, Region 10 EPA, Re: Fw from Scott Winges, Environ, Re: for Record: Shell Beaufort – Nuiqsut?
CC-139	2/08/2010	Email from Mary Portanova, USEPA, to Juliane Matthews, Region 10 EPA, Re: Fw For the Record: Shell Badami - Nuiqsut
CC-140	2/08/2010	Memo from Chris Hall, EPA Region 10, to Mary Portanova, EPA Region 5, Air and Radiation Division, Subject: Badami Air Monitoring Data Review – August 15 through December 15, 2009
CC-141	2/10/2010	Email from Mary Portanova, USEPA, to Juliane Matthews, Region 10 EPA, Re: Fw email from Kirk Winges, Environ, re Fw for Record: Horizontal Spacing
CC-142	2/11/2010	Letter from Richard Albright, EPA, to Susan Childs, Shell Offshore Inc., re: Shell Offshore Inc. January 18, 2010 PSD Permit Application for Frontier Discoverer Drill Vessel in the Beaufort Sea

November 14, 2011 Page 143 of 197

EPA Exhibit		
Number	Date	Document Title
CC-143	2/12/2010	Email from Thomas Damiana, AEC, to Christopher Hall, Region 10 EPA, Re: Badami Data Set
CC-144	2/14/2010	Email from Thomas Damiana, AEC, to Christopher Hall, Region 10 EPA, Re: Badami QAPP
CC-145	2/14/2010	Email from Thomas Damiana, AEC, to Christopher Hall, Region 10 EPA, Re: Badami Data Report
CC-146	2/15/2010	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Beaufort Permit Statement of Basis Appendix A
CC-147	2/15/2010	Email from Natasha Greaves, EPA, to Eric Hansen, Environ, re: Beaufort Permit Statement of Basis Appendix A Att.1: Appendix A
CC-148	2/16/2010	Email from Kirk Winges, Environ, to Natasha Greaves, EPA, re: Follow-up on Cat D399, 3304 and D343 with attachments
CC-149	2/16/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Re: Badami QAPP Attachment: Badami Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Plan
CC-150	2/16/2010	Environ Email Uploaded Modeling Files. Printed files include: Revised Appendix, Appendix A and Appendix D. The following files were not printed. Data Files (OUT, INP and PLT format) Other Icebreaker Setups Nanuq Refuel Bow Washing Anchor Setting Retrieval Alternate Incinerator Configuration 1 Alternate Incinerator Configuration 2 Anchor Handler Resupply PDF Files Badami Monitoring Data Emissions Excel Files EmissionsForEPA_01132010 January Scenario Summary Original files can be found on the Chukchi Administrative Record Compact Disc at the following file path: CC - Correspondence and Communication between EPA and Shell (including Shell Contractors) (continued)\CC-150 (*Note: BSModeling_145433 Folder includes revised versions of the above files)

November 14, 2011 Page 144 of 197

EPA Exhibit Number	Date	Document Title
CC-151	2/16/2010	Email from Kirk Winges, ENVIRON, to Natasha Greaves, EPA, Re: Files have been uploaded for you with attachments.
CC-152	2/17/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, regarding Badami QAPP
CC-153	2/19/2010	Email from Thomas Damiana, AECom, to Christopher Hall, Region 10 EPA, Re: Badami QAPP (Attached is a final digital version of the Badami QAPP with signature page included.) [See email and attachment of 2/16/10 from Thomas Damiana]
CC-154	2/24/2010	Email from Mary Portanova, USEPA, to Wong, Bray and Hastings, Region 10 EPA, Re: Conversation with Environ
CC-155	2/26/2010	Email from Mary Portanova, EPA, to Juliane Matthews, EPA, Re: Fw for Record: Bow Washing OK
CC-156	3/09/2010	Email from Kirk Winges, Environ, to Natasha Greaves, EPA, re: Request for PDF of Figure 1-2 with attachment
CC-157	3/11/2010	Email from Mary Portanova, USEPA, to Natasha Greaves and David Bray, Region 10 EPA, Re: Call with Environ re Icebreaker Position (and Viscreen) [1]
CC-158	3/11/2010	Email form Mary Portanova, EPA, to Janis Hastings, EPA, Re: Call to Environ Re: VISCREEN [2]
CC-159	3/11/2010	Email from Mary Portanova, USEPA, to Natasha Greaves and David Bray, Region 10 EPA, Re: Call with Environ re Icebreaker Position and Viscreen [3]
CC-160	3/16/2010	Email from Thomas Damiana, AECom, to Herman Wong, Region 10 EPA, Re: Shell Reindeer Island QAPP Attachment 1: QAPP List for Herman Wong Attachment 2: Reindeer Island Meteorological Monitoring Station Quality Assurance Project Plan
CC-161	3/29/2010	Email from Thomas Damiana, AECom, to Herman Wong, Region 10 EPA, Final Reindeer Island QAPP
CC-162	3/30/2010	Memo from Kirk Winges, Environ, to Jan Hastings, EPA, re: Shell Beaufort VISCREEN Model Results [See email and attachment of 3/16/10 from Thomas Damiana]

November 14, 2011 Page 145 of 197

EPA Exhibit Number	Date	Document Title
CC-163	4/01/2010	Email from Paul Boys to Eric Hansen Re: Test Protocol
CC-164	4/06/2010	Email from Thomas Damiana, AECom, to Christopher Hall, Region 10 EPA, Re: Badami Q4 Report [See email and attachment of 2/16/10 from Thomas Damiana]
CC-165	4/07/2010	Email from Thomas Damiana, AECom, to Christopher Hall, Region 10 EPA, Re: Badami Q4 Report [See email and attachment of 2/16/10 from Thomas Damiana] [1]
CC-166	4/07/2010	Email from Thomas Damiana, AECom, to Christopher Hall, Region 10 EPA, Re: Badami Q4 Report [2]

Return to Section CC

Return to Table of Contents

November 14, 2011 Page 146 of 197

Section D: Other Correspondence

	tner Correspo	ongence
EPA		
Exhibit	D /	D
Number	Date	Document Description
D-1	10/31/2005	Letter from Colleen Burgh, EPA, to Paul Stang, MMS, Re: Notice of Intent: Outer Continental Shelf, Alaska Region, Chukchi Sea Oil and Gas Lease Sale 1993 for 2007
D-2	12/27/2006	Letter from Christine Reichgott, EPA, to John Goll, MMS, Re: Draft Environmental Impact Statement: Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea
D-3	3/19/2008	Letter from Joyce C. Kelly to Richard A. Wayland, RE: Request for Office of Air Quality Planning and Standards support of precedent setting monitoring and modeling activities related to oil development permitting actions in Alaska.
D-4	9/23/2008	Email from Alan Schuler at AK DEC to Herman Wong, EPA Region 10. Subject: RE: Shell and Conoco Phillips AQ data collection options
D-5	9/23/2008	Email from Alan Schuler at AK DEC to Herman Wong, EPA Region 10. Subject: FW: Shell and Conoco Phillips AQ data collection options
D-6	10/14/2008	E-mail from Herman Wong, EPA to Pat Nair, EPA regarding ConcoPhillips Chukchi Sea Permitting – Wainwright Ambient Monitoring Program
D-7	10/22/2008	Email from Alan Schuler at AK DEC to Herman Wong, EPA Region 10. Subject: North Slope Background Data
D-8	11/17/2008	E-mail from Herman Wong, EPA to Christopher Hall, EPA regarding ConcoPhillips Wainwright Near-Term Monitoring Station As-Built Photos
D-9	11/18/2008	E-mail from Herman Wong, EPA to Thomas Damiana regarding ConocoPhillips Wainwright Near-Term Monitoring Station QAPP
D-10	3/8/2009	Email from Tim Martin to John Notar regarding Shell Offshore, Inc Alaska
D-11	4/6/2009	Letter from Shell to US Coast Guard regarding Request for Establishment of a Temporary Safety Zone around the Drillship <i>Frontier Discoverer</i> , Chukchi Sea
D-12	5/28/2009	Email from Daniel Hartung at MMS to Pat Nair, EPA Region 10. Subject: MMS Alaska Daniel Hartung RE: Question on OCS Lease Blocks

November 14, 2011 Page 147 of 197

EPA Exhibit		
Number	Date	Document Description
D-13	5/29/2009	E-mail from Jonathan Jemming to Nancy Helm regarding Shell Air Permit Application
D-14	6/2/2009	E-mail from Jonathan Jemming to Pat Nair, EPA regarding Shell Application – Cover Letter, Report and Appendix A
D-15	6/8/2009	Email from John Notar at NPS to Herman Wong, EPA Region 10. Subject: Fw: Shell Chukchi and Beaufort PSD Applications
D-16	6/9/2009	Email from Nancy Helm, EPA, to Jonathan Jemming, North Slope, re: Shell Application Appendix G
D-17	6/11/2009	E-mail from Daniel Hartung to Pat Nair, EPA regarding Follow Up Questions on Chukchi
D-18	6/23/2009	Email from Bryan Herczeg, EPA, to Natasha Greaves, EPA, re: Corps Permits for Offshore Exploration Att. 1: Nationwide Permit Notices (2)
D-19	6/23/2009	Email from Nancy Helm, EPA, to Juliane Matthews, EPA, re: Camdem Bay and Chukchi Exp. Plans and Environment Impact Analyses
D-20	6/24/2009	E-mail from Dave Bray to Gary A Mendivil regarding Shell's OCS Air Permit – Beaufort Seas
D-21	7/1/2009	E-mail from Jonathan Jemming to Ashley Zanolli regarding Info Share from Barrow
D-22	7/2/2009	Email from Alan Schuler at AK DEC to Herman Wong, EPA Region 10. Subject: North Slope Air Quality Control Region
D-23	7/7/2009	E-mail from Dave Bray to Gary Mendivil regarding Shell's OCS Air Permit – Beaufort Seas
D-24	7/15/2009	Email from Sarah Saunders, Earthjustice, to Steve Black, Dept. of Interior, re: Letter to Agencies with comments Att. 1: Letter to Liz Birnbaum, Minerals Management Service, Jane Lubchenco, NOAA, Nancy Sutley, Council of Environmental Quality, Sue Hamilton, USFWS, Lisa Jackson, EPA
D-25	7/16/2009	E-mail from Molly Holt to Edmund Fogels regarding Call to discuss EPA's CZMA responsibilities

November 14, 2011 Page 148 of 197

EPA Exhibit		
Number	Date	Document Description
D-26	7/16/2009	E-mail from Jeffery Walker to Meg Silver regarding Call to discuss EPA's CZMA responsibilities
D-27	7/30/2009	Letter from the Congress of the United States to EPA
D-28	8/4/2009	E-mail from Alan Schuler to Herman Wong, EPA regarding North Slope Data
D-29	8/5/2009	Email from John Notar at NPS to Herman Wong, EPA Region 10. Subject: Re: Shell Chukchi and Beaufort PSD Applications
D-30	8/5/2009	EPA Letter to Earthjustice Regarding Earthjustice's 7/15/09 to MMS, USFWS, NOAA, EPA, and CEQ's Administrators
D-31	8/10/2009	Fax of Letter from Earthjustice to EPA Regarding the Chukchi and Beaufort Permit Application
D-32	8/10/2009	Fax Transmittal Letter from Erik Grafe, Earthjustice, to Natasha Greaves, Pat Nair, EPA, re: Shell Gulf of Mexico's Applications for Air Quality Permits for Exploration Drilling in the Chukchi and Beaufort Seas 2010
D-33	8/12/2009	Email from Alan Schuler at AK DEC to Herman Wong, EPA Region 10. Subject: PM2.5 Data
D-34	8/12/2009	E-mail from Megan Williams to Pat Nair, EPA regarding EPA contact
D-35	8/19/2009	E-mail from Brad Thomas, ConocoPhillips Alaska regarding Collocated PM 2.5 Monitors with Attachment
D-36	8/20/2009	Email from Brad Thomas, ConocoPhillips Alaska to EPA regarding Collocated PM 2.5
D-37	8/20/2009	EPA Letter to Congressman Don Young; Senator Mark Begich; and Senator Lisa Murkowski
D-38	8/21/2009	EPA Letter to Earthjustice Regarding their 8/10/09 Letter Regarding the Chukchi and Beaufort Permit Application

November 14, 2011 Page 149 of 197

EPA Exhibit Number	Date	Document Description
D-39	8/24/2009	E-mail from Gary Mendivil to Suzanne Skadowski regarding Chukchi Sea OCS/PSD proposed permit Information meetings and Public hearings
D-40	8/28/2009	Email from Dianne Soderlund, EPA, to Suzanne Skadowski, EPA, re: Chukchi Informational Meetings and Public Hearings—ADEC
D-41	9/2/2009	Email from Theodore Rockwell, EPA, to Andy Mack, North Slope, re: Shell EP/Camden Bay – NSB Comments – Barrow Meeting Opportunities [3]
D-42	9/11/2009	Letter from Matthew Cohen, Stoel Rives, LLP, to Bill Harnett, EPA, re: PSD Increment Consumption on the Outer Continental Shelf Att. 1: July 2, 2009 Memo from Dave Bray, EPA, to Rick Albright, Janis Hastings, EPA, re: Clarification on EPA Implementation of PSD Increments on the OCS in Alaska Att. 2: EPA Statement of Basis for Proposed Outer Continental Shelf (Attachment B)
D-43	9/29/2009	Email from Matt Cohen for ConocoPhillips re Comment Period Extension Requests
D-44	10/2/2009	Email from Natasha Greaves, EPA, to Jonathan Jemming, North Slope, re: Air News Release (HQ): New EPA Rule Will Require Use of Best Technologies to Reduce Greenhouse Gases from Large Facilities Att. 1: News Release of New EPA Rule
D-45	10/2/2009	Email from Jonathan Jemming, North Slope, to Bessie O'Rourke, North Slope, re: EPA Withdraws Bush-Era Oil, Gas "Aggregation" Permitting Policy Att. 1: Sept. 22, 2009 Letter from Gina McCarthy, Assistant Administrator, EPA, to Regional Administrators, Regions 1-X, re: Withdrawal of Source Determinations for Oil and Gas Industries
D-46	10/8/2009	Email from Jonathan Jemming, North Slope, to Natasha Greaves, EPA, re: EPA: Reconsideration of Interpretation of Regs that Determine Pollutants Covered by Federal PSD Permit Program Att. 1: Federal Register Notice
D-47	10/26/2009	Email from Brad Thomas, ConocoPhillips Alaska regarding Deadhorse Update
D-48	11/13/2009	Letter from Jeffrey Walker, U.S. Dept. of Interior to Judith Bittner, State Historic Preservation Officer, Alaska regarding archaeological analysis of the OCS.

November 14, 2011 Page 150 of 197

EPA Exhibit		
Number	Date	Document Description
D-49	11/13/2009	Email from Vikram Kashyap, Trinity Consultants, to Natasha Greaves, EPA, re: Question on PSD Exemptions for OCS Sources
D-50	11/16/2009	Email from Natasha Greaves, EPA, to Vikram Kashyap, Trinity Consultants, re: Attachment to Question on PSD Exemptions for OCS Sources Att. 1: 10/9/1979 Letter from William A. Spratlin, Jr., Chief, EPA, to Harvey D. Shell, Shell Engineering and Associates, re: PSD Review
D-51	11/17/2009	Email and letter from Jonathan Jemming, North Slope Borough Office of the Mayor, to Suzanne Skadowski Re: Shell Offshore 2010 Chukchi Sea OCS Exploration Plan and Environmental Impact Statement
D-52	12/2/2009	Email from Julie Vergeront, EPA, to Janis Hastings, EPA, re: Call from Jonathan Jemming
D-53	12/7/2009	Email from Nancy Helm, EPA, to Natasha Greaves, EPA, re: Revised Shell Material for Workshop Sent by Jonathan Jemming Att. 1: Workshop Material: Chukchi and Beaufort PSD Air Permits, Dec. 1, 2009
D-54	12/7/2009	Letter to Susan Childs, Shell from Jeffery Walker, US Dept. of Interior, MMS, regarding conditional approval of the Shell proposed 2010 Outer Continental Shelf Lease Exploration Plan
D-55	12/7/2009	MMS-Alaska OCS Region Finding of No Significant Impact, 2010 Exploration Drilling Program, Burgerm Crackerjack, and SW Shoebill Prospects Chukchi Sea Outer Continental Shelf, Alaska
D-56	12/9/2009	Email from Juliane Matthews, EPA, to Kristi Smith, EPA, re: MMS Polar Bear Critical Habitat Biological Evaluation. Att. 1: Memo from John Goll, Regional Director, MMS, to Regional Director, USFWS, re: Section 7 Endangered Species Act – Proposed Polar Bear Critical Habitat
D-57	12/16/2009	Letter from Jeff Walker, US Dept. of Interior MMS, to Julie Vergeront, EPA regarding MMS's view on "regulated or authorized under OCSLA"
D-58	12/16/2009	Letter from Gregg M. Worley, EPA, to Darrell E. Hollek, VP of GoM Operations, Anadarko Petroleum Corporation, Re: Phoenix Project, Lloyd Ridge 410 Well #1, Air Permit Application
D-59	1/8/2010	Email from Eric Hansen, Environ to Mark Schiendler, Octane and Janis Hastings, EPA, BACT

November 14, 2011 Page 151 of 197

EPA Exhibit Number	Date	Document Description
D-60	1/8/2010	Email from Mark Schindler, Octane, to Janis Hastings, EPA, EPA proposes new modified air quality permit to Shell Gulf of Mexico, Chukchi Sea, Alaska
D-61	1/11/2010	Email from Damiana to Christopher Hall re Deadhorse Sampling Frequency
D-62	1/11/2010	Email from Damiana to Herman Wong re Wainwright Near-Term Nov and Dec Preliminary Data
D-63	1/15/2010	Letter from Suzanne Skadowski, EPA to David Hobstetter, Earthjustice Re: Chukchi Record Request forwarding Permit Application Materials
D-64	1/15/2010	E-mail from David Hobstetter, Earth Justice to Suzanne Skadowski, EPA Re: Shell Chukchi OCS/PSD permit documents request
D-65	1/29/2010	Letter from Suzanne Skadowski, EPA to Jonathan Jemming and Tanya Sanerib Re: Permit Application Materials
D-66	1/29/2010	E-mail from Suzanne Skadowski, EPA to Jonathan Jemming and Tanya Sanerib Re: Request for Record (Shell Chukchi OCS/PSD) and Re: Follow-up and Request for Record
D-67	1/29/2010	Letter from EPA to Jonathan Jemming and Tanya Sanerib, Re: Resending Permit Application Materials in CD
D-68	2/5/2010	Letter from North Slope Borough Planning and Community Services Department to Gary Mendivil and Nina Brudie, Re: NSB Comments on ACMP Consistency-AIR QUALITY CONCERNS Shell Offshore, Inc. 2010 Outer Continental Shelf Lease Exploration Plan, Chukchi Sea, Alaska, State ID NO. AK0911- 010G
D-69	2/9/2010	Email from Suzanne Skadowski to David Hobstetter, Re: requested Shell Chukchi application on file
D-70	2/16/2010	Email from Jan Hastings, EPA, to Dianne Soderlund, EPA, re: 10am Call Today, Seattle Time
D-71	2/22/2010	Letter from Lisa Jackson to Senator Jay D. Rockefeller IV in response to his letter of 2/19/2010.

November 14, 2011 Page 152 of 197

EPA Exhibit	Data	Degument Degarintian
Number	Date	Document Description
D-72	3/03/2010	Email from Suzanne Skadowski, Region 10 EPA, to Jonathan Jemming, NSB, Re: EPA Shell Chukchi Web Page
D-73	3/04/2010	Email from Suzanne Skadowski, Region 10 EPA, to Patrick Durrer, Re: Recording of EPA Shell Chukchi Feb. 16 Public Hearing Teleconference
D-74	3/17/2010	Email from Mark Prettyman, DNREC, to Dave Bray, Region 10 EPA, Re: Shell Permits Email Review. Attachment 1: Stationary Generators- OTC Model Rule- Draft 2 Attachment 2: Emissions Standards Comparison – Engines and Generators Attachment 3: OTC Pechan Reports
D-75	3/18/2010	Email from Suzanne Skadowski, Region 10 EPA, to Tony Mendoza, Crowell & Moring, LLP, Re: AR Request for shell Chukchi & Beaufort. Attachment 1: Letter from Suzanne Skadowski to Tony Mendoza, Permit Administrative Records as requested for EPA Proposed OCS/PSD Air Permits: Shell Gulf of Mexico, Inc./Shell Offshore, Inc. – Chukchi Sea/Beaufort Sea
D-76	3/29/2010	Email from Nancy Helm to Julie Vergeront transmitting 2/18/10 email from Nancy Helm, Region 10 EPA, to Jack Schaefer, Councilmember of the Inupiat Community of the Arctic Slope Re: Air Quality Modeling Question
D-77	3/26/2010	Email from Janis Hastings, EPA to Julie Vergeront, EPA, forwarding email from David Dickson, Alaska Wild, to Drew McConville, EPA, Re: FW Following up on PSD Permits for Shell exploratory drilling in the Arctic Ocean Attachment: 03/22/2010 Letter from Conservationists to EPA Region 10, Re: Proposed OSC/PSD Permit Number R10OCS/PSD-AK-2010-01

Return to Section D

Return to Table of Contents

November 14, 2011 Page 153 of 197

Section DD: Other Correspondence (cont.)

	Cinci Corres	pondence (cont.)
EPA		
Exhibit	-	
Number	Date	Document Description
DD-1	5/29/2009	Letter from Edward Itta, Mayor, North Slope Borough, to Honorable Ken Salazar, Secretary, Dept. of Interior, re: Public Participation and Environmental Review Process
DD-2	6/12/2009	Email from Nancy Helm, EPA, to Jonathan Jemming, North Slope, re: Beaufort Application Att. 1: Outer Continental Shelf Pre-Construction Air Permit Application
DD-3	8/27/2009	Email from Diane Soderlund, EPA, to Jeffrey Walker, MMS, re: Proposed Meeting on Shell's EP
DD-4	8/27/2009	Email from Jonathan Jemming, North Slope Borough, to Theodore Rockwell, Re: Meeting on Shell's Beaufort Sea, Camden Bay EP
DD-5	8/28/2009	Email from Jeffrey Walker, MMS, to Dianne Soderlund, EPA, re: Proposed Meeting on Shell's EP
DD-6	9/02/2009	Email from Karen Crain, North Slope Borough, to Hanh Shaw, EPA, re: Sept. 2, 2009 Telephonic Meeting re: Shell Camden Bay EP [1]
DD-7	9/02/2009	Email from Michael Lidgard, EPA, to Karen Crain, North Slope Borough, re: Sept. 2, 2009 Telephonic Meeting re: Shell Camden Bay EP [2]
DD-8	9/02/2009	Email from Natasha Greaves, EPA, to Karen Crain, North Slope Borough, re: Sept. 2, 2009 Telephonic Meeting re: Shell Camden Bay EP [4]
DD-9	9/02/2009	Email Scheduler from Karen Crain, North Slope, to Natasha Greaves, EPA, re: Meeting with Andrew Mack, Special Assistant to Mayor Itta, North Slope Borough
DD-10	9/18/2009	Email from Linda Bell, ADEC, to undisclosed recipients, re: NSR Implications of the PM2.5 Standard Att. 1: New Source Review Implications of the PM2.5 Ambient Air Quality Standards
DD-11	9/21/2009	Letter from Nina Brudie, Alaska Dept. of Natural Resources, to Susan Childs, Shell Offshore Inc., re: Shell 2010 Camden Bay Exploration, Beaufort Sea Att. 1: Sept. 1, 2009 letter from Nina Brudie, Alaska Dept. of Natural Resources, to Susan Childs, Shell Offshore Inc., re: 2010 Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska, Start of ACMP Review Att. 2: Public Notice: Shell Camden Bay Offshore Exploration, Beaufort Sea

November 14, 2011 Page 154 of 197

EPA		
Exhibit		
Number	Date	Document Description
DD-12	9/21/2009	Email from Jonathan Jemming, NSB, to Nancy Helm, EPA, Re: FW: 2009_0918_Shell Attachment: Letter from Susan Childs, Shell, to Jeffrey Walker, MMS, Re: MMS Request for Amendment to Shell Offshore Inc., 2010 Outer Continental Shelf Exploration Plan, Camden Bay, Beaufort Sea, Alaska
DD-13	9/24/2009	Email from Jonathan Jemming, North Slope, to Natasha Greaves, EPA, re: Clarification of Document (MMS Request for Amendment to the Shell Offshore Inc., 2010 Outer Continental Shelf Exploration Plan, Camden Bay)
DD-14	9/30/2009	Email from Natasha Greaves, EPA, to Jonathan Jemming, North Slope, re: Letter to MMS re: Shell's Beaufort Sea Exploration Plan Att 1: Sept. 28, 2009 Letter from David Dickson, Alaska Wilderness League, Rebecca Noblin, Center for Biological Diversity, Charles M. Clusen, Natural Resources Defense Council, Eric F. Myers, Audubon Alaska, Erik Grafe, Earthjustice, Pamela Miller, Northern Alaska Environmental Center, to Jeffrey Walker, John Goll, Minerals Management Service re: Shell Offshore Inc. Proposed 2010 Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska
DD-15	10/9/2009	Email from Jonathan Jemming, North Slope, to Jeffrey Walker, MMS, re: North Slope Borough Comments – Amended Camden Bay EP Att. 1: Oct. 9, 2009 Letter from Edward S. Itta, Mayor, North Slope Borough, to John Goll, Jeffrey Walker, MMS, re: Shell Offshore Inc.'s 2010 Camden Bay Outer Continental Shelf Lease Exploration Plan, Alaska (June 2009 and Sept. 2009) [See 11/09/09 email and attachment from Ben Green]
DD-16	11/04/2009	Email from Nina Brudie, Alaska Dept. of Natural Resources, to Susan Childs, Shell Offshore Inc., re: Shell Camden Bay Exploration – Restart of ACMP Review Att. 1: Letter from Nina Brudie, Alaska Dept. of Natural Resources, to Susan Childs, Shell Offshore Inc., re: Shell 2010 Camden Bay Exploration, Beaufort Sea Att. 2: Letter from Graham Wood, ADEC, re: Shell Offshore Inc. Oil Discharge Prevention and Contingency Plan for Beaufort Sea Exploration
DD-17	11/06/2009	Email from Nina Brudie, Alaska Dept. of Natural Resources, to Susan Childs, Shell Offshore Inc., re: Comments received, Shell 2010 Camden Bay Exploration

November 14, 2011 Page 155 of 197

EPA Exhibit Number	Date	Document Description
DD-18	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration Att. 1: Arctic Offshore Oil and Gas Development Policy Positions Att. 2: Letter from Daniel W. Forster, Director, to Nina Brudie, ADNR, re: NSB Comments on Consistency with ACMP Enforceable Policies
DD-19	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration Att. 1: July 27, 2007 Letter from Ed Fogels, Alaska Dept. of Natural Resources, to Greg Horner, ASRC Energy Services, and Susan Childs, Shell Offshore, re: Final Consistency Response Att. 1: Alaska Coastal Management Program Final Consistency Response Concurrence Att. 2: Commissioner's Finding of Fact and Decision Att. 3: ACMP Consistency Determination
DD-20	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration Att. 1: 8/31/09 Letter from Edward S. Itta, Mayor, North Slope Borough, to John Goll, Minerals Management Service, re: Shell Offshore 2010 Outer Continental Shelf Lease Exploration Plan and Environmental Impact Assessment
DD-21	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration Att. 1: Letter from Dan Forster, Director North Slope Borough, to Gary Mendivil, Alaska Dept. of Environmental Conservation, Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on ACMP Consistency – ODPCP Concerns
DD-22	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration Att. 1: EcoHealth: Inupiat Health and Proposed Alaskan Oil Development: Results of the First Integrated Health Impact Assessment/Environmental Impact Statement for Proposed Oil Development on Alaska's North Slope

November 14, 2011 Page 156 of 197

EPA Exhibit Number	Date	Document Description
DD-23	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration Att. 1: July 27, 2007 Letter from Ed Fogels, Alaska Dept. of Natural Resources, to Greg Homer, ASRC, Susan Childs, Shell Offshore Inc, re: Final Consistency Response Att. 1: Final Consistency Response—Attachment 1 Att. 2: Commissioner's Finding of Fact and Decision—Attachment 2 Att. 3: ACMP Consistency Determination Att.4: Letter from Susan L. Harvey, Harvey Consulting, LLC, to Harold Curran, North Slope Borough Mayor's Office, re: Review of Shell Exploration and Production Company's Aug. 2008 Analysis Att. 5: Integrating Human Health into Environmental Impact Assessment by Rajiv Bhatia and Aaron Wernam
DD-24	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration (email #1 of 3) Att. 1: November 9, 2009 Letter from Dan Forster, North Slope Borough, to Gary Mendivil, ADEC, and Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on ACMP Consistency – Water Quality Concerns
DD-25	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration (email #1 of 4) Att. 1: 8/31/09 Letter from Edward S. Itta, Mayor, North Slope Borough, to John Goll, MMS, re: Shell Offshore 2010 Outer Continental Shelf Lease Exploration Plan and Environmental Impact Assessment Att. 2: Letter from Daniel W. Forster, North Slope Borough, to Gary Mendivil, ADEC, Nina Brudie, ADNR, re: NSB Comments on ACMP Consistency –Air Quality Concerns

November 14, 2011 Page 157 of 197

EPA		
Exhibit Number	Date	Document Description
DD-26	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration (email #2 of 4) Att. 1: Oct. 20, 2009 Letter from Harry Brower, Alaska Eskimo Whaling Commission, Doreen Lampe, Inupiat Community of the Arctic Slope, Edward S. Itta, North Slope Borough, to Pat Nair, Nancy Helm, Shell Chukchi OCS Air Permit, re: Shell Gulf of Mexico/Shell Offshore Inc.'s Application for a Chukchi Sea Clean Air Act Permit Att. 2: Health Impacts Att. 3: Oct. 9, 2009 Letter from Edward S. Itta, Mayor, North Slope Borough, to John Goll, Jeffrey Walker, Minerals Management Service, re: Shell Offshore Inc.'s 2010 Camden Bay Outer Continental Shelf Lease Exploration Plan, Alaska (June 2009 and September 2009) Att. 4: AEW, ICAS, and North Slope Borough Comments re: Shell Gulf of Mexico and Shell Offshore Inc., Application for an OCS PSD Permit under the Clean Air Act for It's Chukchi Sea Operations
DD-27	11/09/2009	Email from Ben Greene, North Slope, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB Comments on Consistency with ACMP Enforceable Policies, Shell 2010 Camden Bay Exploration (email #3 of 3 (not 4)) Att. 1: Oct. 9, 2009 Letter from Edward S. Itta, Mayor, North Slope Borough, to John Goll, Jeffrey Walker, Minerals Management Service, re: Shell Offshore Inc.'s 2010 Camden Bay Outer Continental Shelf Lease Exploration Plan, Alaska (June 2009 and September 2009) Att. 2: July 27, 2007 Letter from Ed Fogels, Alaska Dept. of Natural Resources, to Greg Horner, ASRC Energy Services, Susan Childs, Shell Offshore, Inc., re: Final Consistency Response Att. 3: Final Consistency Response Concurrence (Attachment 1) Att. 4: DNR Commissioner's Finding of Fact and Decision (Attachment 2) Att. 5: ADEC Finds of Consistency (Attachment 3)
DD-28	11/18/2009	Email from Suzanne Skadowski, EPA, to Janis Hasting, EPA, re: FYI MMS Letter to Shell and Delegation Letter on Shell EP Att. 1: Letter from John Goll, MMS, to Peter Slaiby, Shell Alaska, re: Responses from Shell Att. 2: Letter from U.S. Congress to Ken Salazar, USDOI

November 14, 2011 Page 158 of 197

EPA Exhibit	Dete	Decement Decemention
Number DD-29	Date 12/9/2009	Document Description Email from Jonathan Jemming, North Slope Borough, to Nina Brudie, Alaska Dept. of Natural Resources, re: NSB ACMP Elevation Request – Shell 2010 Camden Bay Exploration Plan Att. 1: North Slope Borough's Request for Elevation
DD-30	12/10/2009	Email from Nina Brudie, Alaska Dept. of Natural Resources, to Natasha Greaves, EPA, re: : NSB ACMP Elevation Request – Shell 2010 Camden Bay Exploration Plan
DD-31	12/11/2009	Letter from Eric Hodek, AECOM, to Nicole St Amand, Shell, Re: November 2009 Badami Summary
DD-32	12/17/2009	Email from Natasha Greaves, EPA, to Jonathan Jemming, North Slope Borough, re: Info Request and Update Att. 1: Letter from Matthew Cohen, Stoel Rives LLP, to Bill Harnett, EPA, re: PSD Increment Consumption on the Outer Continental Shelf Att. 2: Memo from David Bray, EPA, to Rick Albright, Janis Hastings, EPA, re: Implementing PSD Baseline Dates, Baseline Areas, and Baseline Concentrations on the Outer Continental Shelf in Alaska (draft) Att. 3: EPA Statement of Basis or Proposed Outer Continental Shelf Prevention of Significant Deterioration Att. 4: Sierra Club, Northwest Environmental Defense Center, Friend of the Columbia Gorge, Columbia Riverkeeper, Hells Canyon Preservation Council v. Portland General Electric Co., U.S. District Court, District of Oregon, Case No. CV 08-1136-HA
DD-33	12/17/2009	Email from Jonathan Jemming, North Slope, to Natasha Greaves, EPA, re: Info Request and Update

November 14, 2011 Page 159 of 197

EPA Exhibit Number	Date	Document Description
DD-34	1/06/2010	Email from James Lusher, Minerals Management Service, to Dianne Soderlund, EPA, re: Pt. 1 – NSB Comment.2010.Camden Bay EP/EIA Att. 1: 8/31/09 North Slope Borough Comments on Shell Camden Bay Exploration Plan Att. 2: Part 3: NSB Attachment List, Shell 2010 Camden Bay EP NSB Review Att. 3: 5/29/09 Letter from Edward Itta, Mayor, North Slope Borough, to Ken Salazar, USDOI, re: Request for Public Participation and Environmental Review Att. 4: Declaration of Robert Suydam Att. 5: Declaration of Aaron Wernham Att. 6: Email – Part 2 Att. 7: Email from Daniel Hartung to Mary Felter, re:NSB's Camden Bay EP/EIA comments
DD-35	1/7/2010	Fw: Email from Natasha Greaves, EPA to Mary Portanova EPA, forwarding 8/26/09 email from Alan Shuler, ADEC to Herman Wong, EPA re: ADEC Verification of Shell Regional Inventory
DD-36	2/17/2010	Email from Drew McConville, EPA, to Anna Wood, Janis Hastings, EPA re: Draft Meeting Notes
DD-37	3/2/2010	Letter from Janis Hastings, EPA, to Harold Curran, re: NSB 15-day comment extension request - EPA response letter
DD-38	3/03/2010	Email from Skadowski, EPA, to Jonathan Jemming, NSB, Re: FW: Camden Bay Proposed Air Permit Request
DD-39	3/16/2010	Email from Suzanne Skadowski, EPA, to Jonathan Jemming, re: Camden Bay Proposed Air Permit – Request for Appendices to Statement of Basis
DD-40	3/23/2010	Email from Nicole Whittington-Evans, The Wilderness Society, to R10 OCS Air Permits, re: Comments

Return to Section DD

Return to Table of Contents

November 14, 2011 Page 160 of 197

Section E: Endangered Species Act/ Essential Fish Habitat

EPA	iluangereu Sp	becies Act/ Essential Fish Habitat
Exhibit		
Number	Date	Document Description
E-1	08/1993	U.S. Dept. of Interior, Mineral Management Service, August 1993. Guidelines for Oil and Gas Operations in Polar Bear Habitats, AK OCS Study, MMS93-0008
E-2	8/2/2006	71 Federal Register 43926 (August 2, 2006), Final Rule, Marine Mammals; Incidental Take During Specified Activities
E-3	12/21/2006	Range-Wide Status Review of the Polar Bear (Ursus maritimus) prepared by Scott Schliebe, Thomas Evans, Kurt Johnson, Michael Roy, Susanne Miller, Charles Hamilton, Rosa Meehan and Sonja Jahrsdoerfer, U.S. Fish and Wildlife Service
E-4	2007	The Marine Mammal Protection Act of 1972, As Amended 2007
E-5	1/9/2007	72 Federal Register 1064 (January 9, 2007), Proposed Rule to List the Polar Bear (Ursus maritimus) as Threatened Throughout Its Range
E-6	1/30/2007	Letter from Robert Mecum, NMFS to John Goll, MMS, re MMS Draft EIS for Chukchi Planning Area
E-7	3/28/2007	Biological Opinion for Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 and Associated Seismic Surveys and Exploratory Drilling
E-8	05/2007	Final EIS Chukchi Sea Planning Area, OCS EIS/EA MMS 2007-026 (Volume 1). File not printed. See Chukchi Administrative Record Compact Disc at the following file path: E - Endangered Species Act/ Essential Fish Habitat/E8.
E-9	05/2007	Final EIS Chukchi Sea Planning Area, OCS EIS/EA MMS 2007-026 (Volume 2). File not printed. See Chukchi Administrative Record Compact Disc at the following file path: E - Endangered Species Act/ Essential Fish Habitat/E9.
E-10	05/2007	Final EIS Chukchi Sea Planning Area, OCS EIS/EA MMS 2007-026 (Volume 3). File not printed. See Chukchi Administrative Record Compact Disc at the following file path: E - Endangered Species Act/ Essential Fish Habitat/E10.
E-11	05/2008	Fish and Wildlife Service (FWS) "Polar Bear (Ursus maritimus)"
E-12	5/14/2008	FWS Memorandum Re: "Expectations for Consultations on Actions that Would Emit Greenhouse Gases"

November 14, 2011 Page 161 of 197

EPA Exhibit		
Number	Date	Document Description
E-13	5/15/2008	73 Federal Register 28212 (May 15, 2008), Final Rule, Determination of Threatened Status for the Polar Bear (Ursus maritimus) Throughout Its Range
E-14	5/15/2008	73 Federal Register 28306 (May 15, 2008), Interim Final Rule, Special Rule for the Polar Bear
E-15	6/3/2008	Programmatic Biological Opinion for Polar Bears on Chukchi Sea Incidental Take Regulations
E-16	6/11/2008	73 Federal Register 33212 (June 11, 2008), Final Rule, Marine Mammals; Incidental Take During Specified Activities
E-17	7/17/2008	Biological Opinion for Oil and Gas Leasing and Exploration Activities in the U.S. Beaufort and Chukchi Seas, Alaska; and Authorization of Small Takes Under the Marine Mammal Protection Act
E-18	1/8/2009	Letter from Rose Meehan to Susan Childs, Re: Response to November 13, 2008 request for Letters of Authorization for the Incidental and Intentional take of Polar Bears in regard to the Shell Offshore, Inc. 2009 Beaufort Sea On-Ice Argos data and Buoy Deployment Program
E-19	05/2009	Shell Exploration Plan, 2010 Exploration Drilling Program OCS Lease Sale 193, Chukchi Sea (Volumes 1 - 3). See Chukchi Administrative Record Compact Disc at the following file path: E - Endangered Species Act/ Essential Fish Habitat/E19.
E-20	6/26/2009	Letter from Robert Meecum, NMFS, to John Goll, MMS Re: Essential Fish Habitat
E-21	07/2009	Shell Exploration Plan, 2010 Exploration Drilling Program OCS Lease Sale 193, Chukchi Sea. Pages 1-177 are printed. Pages 178- 143 not printed. See Chukchi Administrative Record Compact Disc at the following file path: E - Endangered Species Act/ Essential Fish Habitat/E21.
E-22	7/27/09	E-mail from Liz Doyle, EPA to Dan Brown regarding Your Request (with attachment of results from Science Direct)
E-23	9/3/2009	Memorandum from Deborah Rocque, U.S. Fish and Wildlife Service, to John Goll, MMS, Re, Endangered Species Act, Section 7 Biological Opinion for Beaufort and Chukchi Sea Program Area lease sales and associated seismic surveys and exploratory drilling (with attached Biological Opinion)

November 14, 2011 Page 162 of 197

EPA Exhibit		
Number	Date	Document Description
E-24	9/4/2009	Letter from Janis Hastings, EPA R10, to Rosa Meehan, U.S. Fish and Wildlife Service, Anchorage, AK, re: Informal Consultation Att.: Evaluation and Basis of EPA R10's Determination Regarding Consultation Obligations
E-25	9/4/2009	Letter from Janis Hastings, EPA R10, to Deborah Rocque, U.S. Fish and Wildlife Service, Fairbanks, AK, re: Informal Consultation Att.: Evaluation and Basis of EPA R10's Determination Regarding Consultation Obligations
E-26	9/4/2009	Letter from Janis Hastings, EPA R10, to Robert D. Mecum, NOAA, Att.: Evaluation and Basis of EPA R10's Determination Regarding Consultation Obligations
E-27	9/23/2009	Letter from Deborah Rocque, U.S. Fish and Wildlife Service, Fairbanks, AK, to Janis Hastings, EPA R10, re: Shell Offshore Inc's Permit Request for Exploratory Drilling in the Chukchi Sea
E-28	9/24/2009	Letter from Janis Hastings, EPA R10, to Robert D. Mecum, NOAA, re: Clarification of EPA Determinations Regarding Potential Effects of CAA Permitting Action on Threatened and Endangered Species within Jurisdiction Att.: Evaluation and Basis of EPA R10's Determination Regarding Consultation Obligations
E-29	10/26/2009	Letter from Robert Mecum, NOAA, to Janis Hastings re: 09/24/2009 letter from the EPA R10.
E-30	12/3/2009	Letter from John Goll, MMS to Regional Director, U.S. Fish and Wildlife Service, Alaska Region, regarding Section 7 Endangered Species Act – Proposed Polar Bear Critical Habitat
E-31	3/29/2010	Memo from Richard Albright, Chukchi GHG and ESA Section 7(a)(2) Compliance for Shell Chukchi OCS Permit
E-32	1/19/2010	Email from Julie Vergeront, Region 10 EPA, to Juliane Matthews, Region 10EPA, forwarding 12/08/09 email from Jeffrey Walker, MMS, to Dan Brown, EPA, re MMS Polar Bear Critical Habitat Biological Evaluation Attachment: Memorandum for John Goll, MMS, to Regional Director, U.S. Fish and Wildlife Service, Alaska Region

Return to Section E

Return to Table of Contents

November 14, 2011 Page 163 of 197

Section EE: Endangered Species Act/ Essential Fish Habitat (cont.)

	Endangered S	Species Act/ Essential Fish Habitat (cont.)
EPA		
Exhibit	Doto	Dogument Description
Number	Date	Document Description
EE-1	6/2009	2010 Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska
EE-2	6/23/2009	Email from Nancy Helm, EPA, to Julie Vergeront, EPA, re: 2010 OCS Exploration Plan Camden Bay PUBLIC COPY Att. 1: Public Information Copy: 2010 Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska (5/09)
EE-3	9/04/2009	Letter from Jeffrey Walker, MMS, to Susan Childs, Shell, Re: MMS Request for Amendment to Shell Offshore Inc., Beaufort Sea 2010 Outer Continental Shelf Lease Exploration Plan (EP), Camden Bay, Alaska
EE-4	9/18/2009	Letter from Susan Childs, Shell, to Jeffrey Walker, MMS, Re: MMS Request for Amendment to the Shell Offshore Inc., 2010 Outer Continental Shelf Exploration Plan, Camden Bay, Beaufort Sea, Alaska
EE-5	9/18/2009	Letter from Jeffrey Walker, MMS, to Susan Childs, Shell, Re: Minerals Management Service (MMS) Request for Amendment to the Shell Offshore Inc., Beaufort Sea 2010 Outer Continental Shelf Lease Exploration Plan (EP), Camden Bay, Alaska
EE-6	10/20/2009	Email from Jonathan Jemming, NSB, to Nancy Helm, EPA, Re: MMS Approves Shell Beaufort Sea Exploration Plan Attachment 1: Environmental Assessment Shell Offshore Inc., 2010 Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska Attachment 2: Minerals Management Service – Alaska OCS Region, Finding of No Significant Impact Attachment 3: Letter from Jeffrey Walker, MMS, to Susan Childs, Shell, Re: MMS Approval of EP Subject to Conditions
EE-7	3/1/2010	Letter from Janis Hastings, EPA, to Deborah Rocque, Rosa Meehan, USFWS, re: Basis for Evaluating Potential Effects of Air Permitting Action
EE-8	3/1/2010	Letter from Janis Hastings, EPA, to Robert Mecum, NOAA, re: Basis for Evaluating Potential Effects of Air Permitting Action
EE-9	3/30/2010	Letter from James W. Balsiger, US Dept of Commerce National Oceanic and Atmospheric Administration, Alaska Region, to Janis Hastings, Region 10 EPA, Re: The Potential Effects on Endangered and Threatened Species and Essential Fish Habitat Due to Shell Beaufort Permit

November 14, 2011 Page 164 of 197

EPA Exhibit		
Number	Date	Document Description
EE-10	4/05/2010	Letter from Ted Swerm, Endangered Species Branch Chief, to Janis Hastings, EPA, Re: Shell's Offshore Permit Request for Exploratory Drilling in the Beaufort Sea

Return to Section EE

Return to Table of Contents

November 14, 2011 Page 165 of 197

Section F: Environmental Justice

EPA		dustree
Exhibit		
Number	Date	Document Description
F-1	2/16/1994	Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629
F-2	4/1/1996	1996 Environmental Justice Implementation Plan- EPA/300-R-96-004
F-3	1999	Lazarus, Richard James and Tai, Stephanie, Integrating Environmental Justice into EPA Permitting Authority (2000). Ecology Law Quarterly Vol. 26, pp. 617,
F-4	7/20/2000	Environmental Justice in the Permitting Process, EPA/300-R-00-004
F-5	11/6/2000	Executive Order 13175: Consultation and Coordination with Indian Tribal Governments, 65 Fed. Reg. 67249
F-6	11/22/2000	Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making
F-7	12/1/2000	Memorandum from Gary S. Guzy, General Counsel, Office of General Counsel, re: EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting
F-8	12/1/2001	Report by NAPA for EPA: Environmental Justice in EPA Permitting – Reducing Pollution in High-Risk Communities is Integral to the Agency's Mission.
F-9	11/1/2004	EJ Toolkit – Toolkit for Assessing Potential Allegations of Environmental Injustice. EPA 300-R-04-002.
F-10	11/4/2005	Memorandum from EPA Administrator Stephen L. Johnsonre: Reaffirming EPA's Commitment to Environmental Justice
F-11	4/19/2006	Executive Order 13175: Review of EPA Draft Guidance for Implementing Executive Order 13175, 71 Fed. Reg. 20314
F-12	6/9/2008	Memorandum from EPA Administrator Stephen L. Johnson re: Strengthening EPA Environmental Justice Program
F-13	11/1/2008	Arctic Multiple Sale Draft EIS for MMS Multi-Sale Lease EIS, Appendix B

November 14, 2011 Page 166 of 197

EPA Exhibit		
Number	Date	Document Description
F-14	2/12/2009	OEJ. 2009. EPA Office of Environmental Justice, Frequently Asked Questions http://www.epa.gov/compliance/resouces/faqs/ej/index.htm1#faq2
F-15	5/29/2009	Letter from North Slope Borough Mayor, Edward Itta to Dept. of the Interior Secretary, Ken Salazar
F-16	6/23/2009	E-mail from Jonathan Jemming to Ashley Zanolli regarding Request: EJ Listening Session for Shell OCS Permits – please respond with your availability
F-17	6/24/2009	E-mail from Jonathan Jemming to Ashley Zanolli regarding Request: EJ Listening Session for Shell OCS Permits – please respond with your availability
F-18	6/26/2009	Transcript of EJ Call on OCS Permitting June 26, 2009 with Jonathan Jemming of the North Slope Borough
F-19	6/26/2009	E-mail from Jonathan Jemming to Ashley Zanolli regarding Information Update!: EJ Listening Session for Shell OCS Permits – Agenda attached for Today's 10AM call
F-20	7/9/2009	E-mail from Tami Fordham to Catherine Villa and ICAS regarding EJ Questions for ICAS meeting – tonight? Or another time?
F-21	7/17/2009	E-mail from Ashley Zanolli to Travis Amaulik Carducci regarding July 23 rd ICAS meeting for EPA Region 10 EJ analysis of proposed OCS air permits for Shell Oil's oil and gas exploration in the Chukchi and Beaufort Seas
F-22	7/22/2009	Email from Ashley Zanolli, EPA to Travis Amaulik Carducci regarding 7/23/2009 Special Meeting Agenda – comments we've already heard
F-23	7/23/2009	Memo to File from Ashley Zanolli, EPA with meeting minutes from conference call with ICAS
F-24	7/23/2009	E-mail from Travis Amaulik Carducci to Ashley Zanolli regarding 07/23/2009 Special Meeting Agenda
F-25	7/27/2009	Memo to file from Nancy Helm, EPA, re: Early Outreach to North Slope Communities
F-26	7/28/2009	EPA's Environmental Justice Geographic Analysis Tool, Demographics profile for Atqasuk, Barrow, Kivalina, Kotzebue, Point Hope, Point Lay, Wainwright
Return to Section F Return to Table of Contents		

Return to Section F

Return to Table of Contents

November 14, 2011 Page 167 of 197

Section G: Government-to-Government Consultation

	overnment-to	o-Government Consultation
EPA Exhibit		
Number	Date	Document Description
G-1	11/8/1984	1984 EPA Policy for the Administration of Environmental Programs on Indian Reservations
G-2	2/1/2003	Office of Air Quality Consultation and Communication Procedures
G-3	4/4/2008	Department of the Interior, Bureau of Indian Affairs, Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, 73 Fed. Reg. 18553
G-4	05/2009	North Slope Communication Protocol: Communications Guidelines to Support Meaningful Involvement of the North Slope Communities in EPA Decision-Making, EPA Region 10, May 2009
G-5	06/2009	EPA Air Permits Info Sheet: Shell seeks air permits for exploratory drilling in Chukchi and Beaufort Seas
G-6	6/26/2009	Native Village of Anaktuvuk Pass Consultation Letter
G-7	6/26/2009	Native Village of Atqasuk Consultation Letter
G-8	6/26/2009	Native Village of Barrow Consultation Letter
G-9	6/26/2009	Inupiat Community of the Arctic Slope Consultation Letter
G-10	6/26/2009	Native Village of Kaktovik Consultation Letter
G-11	6/26/2009	Native Village of Kivalina Consultation Letter
G-12	6/26/2009	Native Village of Kotzebue Consultation Letter
G-13	6/26/2009	Native Village of Nuiqsut Consultation Letter
G-14	6/26/2009	Native Village of Point Hope Consultation Letter

November 14, 2011 Page 168 of 197

EPA Exhibit		
Number	Date	Document Description
G-15	6/26/2009	Native Village of Point Lay Consultation Letter
G-16	6/26/2009	Wainwright Traditional Council Consultation Letter
G-17	6/26/2009	EPA Request for Tribal Consultation Mailing List
G-18	7/1/2009	E-mail from Catherine Villa to NV Katovik regarding Consultation letters sent to wrong PO Box
G-19	7/1/2009	E-mail from Catherine Villa to Eunice Stalker regarding Consultation letters sent to wrong PO Box (wrong letter)-Niuqst
G-20	7/1/2009	E-mail from Catherine Villa to Eunice Stalker regarding Consultation letters sent to wrong PO Box (correct letter)-Lay
G-21	7/1/2009	E-mail from Catherine Villa to Rosemary (rahtuagaruak)regarding Nuiqsut
G-22	7/1/2009	E-mail from Catherine Villa to Joseph (jkakpik) regarding Consultation letters sent to wrong PO Box
G-23	7/6/2009	Email from Native Village of Nuiqsut to Tami Fordham, EPA regarding Request for Government-to-Government Consultation
G-24	7/9/2009	Email from Catherine Villa, EPA to Tami Fordham, EPA, and Doreen Lampe at ICAS regarding EJ Questions for ICAS Meeting
G-25	7/9/2009	Email from Catherine Villa, EPA to ICAS regarding Next Tribal Council Meeting
G-26	7/9/2009	E-mail from Tami Fordham, EPA to Native Village of Nuiqsut regarding Request for Government-to-Government Consultation
G-27	7/10/2009	Email from Catherine Villa, EPA to Doreen Lampe regarding Next Tribal Council Meeting
G-28	7/17/2009	E-mail from Travis Amaulik Carducci to June Childress regarding 07/23/2009 Special meeting Agenda (with attachment)
G-29	7/20/2009	E-mail from Michael Y. Brubaker to Catherine, EPA regarding FYI

November 14, 2011 Page 169 of 197

EPA Exhibit		
Number	Date	Document Description
G-30	07/22/09	Memorandum from EPA Administrator Lisa P. Jackson to All EPA Employees regarding EPA Indian Policy
G-31	07/23- 07/24/09	Phone call log – follow up phone calls to communities regarding the Tribal Consultation letter.
G-32	7/24/2009	Fax from Tami Fordham, EPA to Natasha Greaves, EPA re faxes to Ester, Anuktuvuk Pass, and Sophie Henry, ICAS representative for Point Lay, re: follow up on consultation letter
G-33	7/24/2009	E-mail from Tami Fordham, EPA to iraungudruk_70 regarding The enclosures from the letter (e-mail failed)
G-34	7/24/2009	E-mail from Tami Fordham, EPA to iranugudruk_70 regarding The enclosures from the letter
G-35	7/24/2009	E-mail from Tami Fordham, EPA to mongoyak regarding Tribal Consultation
G-36	7/24/2009	E-mail from Tami Fordham, EPA to kvtribeadmin regarding Tribal Consultation?
G-37	7/24/2009	E-mail from Tami Fordham, EPA to Ira Ungudruk regarding Tribal Consultation?
G-38	7/24/2009	Email from Tami Fordham to Ashley Zanolli, re: UPDATE AND FOLLOW-UP: July 23rd ICAS EJ meeting with EPA Region
G-39	7/27/2009	E-mail from Tami Fordham, EPA to Iris Oktollik regarding Shell OCS Air Permitting Actions – Tribal Consultation?
G-40	7/31/2009	Email from Tami Fordham, EPA to Iris Oktollik regarding Shell OCS Air Permitting Actions – Tribal Consultation?
G-41	7/31/2009	E-mail from Tami Fordham, EPA to Robin Mongoyak regarding Tribal Consultation
G-42	8/10/2009	R10 Tribal Consultation Framework
G-43	8/11/2009	Email From Tammy Fordham to Natasha Greaves, Subject Emails regarding Tribal Consultation

November 14, 2011 Page 170 of 197

EPA		
Exhibit Number	Date	Document Description
G-44	8/11/2009	Email From Tammy Fordham to Natasha Greaves, Subject Emails to Nuiqsut, Kaktovic, and Point Lay regarding letter being sent to wrong PO box.
G-45	8/11/2009	Email From Tammy Fordham to Natasha Greaves, Subject Emails to Native Village of Wainwright; the Native Village of Kivalina; the Native Village of Anaktuvuk; Barrow Environmental Program Manager, Robin Mongoyak; Native Village of Point Hope; the Native Village of Barrow follow up on G2G letter, sent electronic copy of letter with attachments.
G-46	8/13/2009	Email from Tammy Fordham to Natasha Greaves, regarding Tribal Consultation Barrow
G-47	8/13/2009	Email 1 From Tammy Forham to iris.oktolik@tikigag.org, Subject Fw: Shell OCS Air Permitting Actions - Tribal Consultation?
G-48	8/13/2009	Email 2 From Tammy Forham to iris.oktolik@tikigag.org, Subject Fw: Shell OCS Air Permitting Actions - Tribal Consultation?
G-49	8/13/2009	Email From Tammy Fordham to Robin Mongoyak, Subject Fw: Tribal Consultation - Barrow
G-50	8/20/2009	Email from Tammy Fordham, EPA Region 10, to Doreen Lampee, President ICAS re: Government-to-Government Consultation
G-51	8/24/2009	Email from Lily Tuzroyluke to Catherine Villa, EPA regarding Shell OCS Air Permitting Actions – Tribal Consultation?
G-52	9/17/2009	Barrow ICAS Sign-In Sheet
G-53	9/21/2009	Community Open House Meeting Agenda, Wainwright, Alaska, Air Quality Permit, Shell Exploration Drilling in the Chukchi Sea
G-54	9/21/2009	Wainwright Community Open House Sign-In Sheet
G-55	9/23/2009	EPA and ICAS Government-to-Government Sign-In Sheet
G-56	9/24/2009	Community Open House Meeting Agenda, Point Hope, Alaska, , Air Quality Permit, Shell Exploration Drilling in the Chukchi Sea

November 14, 2011 Page 171 of 197

EPA Exhibit Number	Date	Document Description
G-57	9/29/2009	Email from Aggie Frankson-Henry to Tami Fordham, EPA regarding Point Hope – Government-to-Government Consultation?
G-58	9/30/2009	Email from Catherine Villa, EPA to Lily Tuzroyluck regarding Point Hope Government-to-Government Consultation?
G-59	10/1/2009	Email from Catherine Villa, EPA to Rick Albright, attaching Letter to Point Hope regarding Follow-up; Tribal Consultation
G-60	10/2/2009	Email from Catherine Villa, EPA to Lily Tuzroyluke regarding Follow-up Consultation – CORRECTION
G-61	10/19/2009	Email from Catherine Villa, EPA to Iris Oktollik regarding Extension Letter
G-62	1/7/2010	Letter to Caroline Cannon, President of Native Village of Point Hope from Richard Albright, EPA regarding Shell Offshore, Inc's Outer Continental Shelf Air Permit Application for Oil and Gas Exploratory Drilling in the Chukchi Sea
G-63	1/7/2010	Letter to George Edwards, IRA Tribal Organization, ICAS from Richard Albright, EPA regarding Shell Offshore, Inc.'s Outer Continental Shelf Air Permit Application for Oil and Gas Exploratory Drilling in the Chukchi Sea
G-64	3/26/2010	Memo from Tami Fordham, EPA, to Beaufort and Chukchi Shell Permit Files, re: Government-to-Government Consultation

Return to Section G

Return to Table of Contents

November 14, 2011 Page 172 of 197

Section GG: Government-to-Government Consultation (cont.)

Section GG	Government	-to-Government Consultation (cont.)
EPA Exhibit		
Number	Date	Document Title
GG-1	2/17/2010	EPA Public Notice of Proposed Air Permit: Shell Offshore Inc. – Beaufort Sea, Alaska
GG-2	2/18/2010	Letter from Richard Albright, EPA, to Bernice Kaigelak, Native Village of Nuiqsut, re: Shell Offshore, Inc.'s Outer Continental Shelf Air Permit Application and Proposed Permit for Oil and Gas Exploratory Drilling in the Beaufort Sea
GG-3	2/18/2010	Email from Tami Fordham, EPA, to ICAS, re: Shell Beaufort PSD – Government to Government Consultation Letter
GG-4	2/18/2010	Email from Tami Fordham, EPA, to Native Village, re: Shell Beaufort PSD – Government to Government Consultation Letter
GG-5	2/18/2010	Letter from Richard Albright, EPA, to George Edwardson, Inupiat Community of the Arctic Slope (ICAS), re: Shell Offshore, Inc.'s Outer Continental Shelf Air Permit Application and Proposed Permit for Oil and Gas Exploratory Drilling in the Beaufort Sea
GG-6	2/23/2010	Email from Tami Fordham, EPA, to NVKaktovik, re: Shell Beaufort PSD – Government to Government Consultation Letter Att. 1: Public Notice Information Sheet Att. 2: Permit to Construct
GG-7	2/27/2010	EPA Region 10: Tribal Consultation Framework
GG-8	3/05/2010	Email from Tami Fordham, EPA, to ICAS Tribal, re: Barrow – Informational Meeting and Government-to-Government Invitation on the Arctic GP (and update on Beaufort PSD)
GG-9	3/05/2010	Email from Catherine Villa, EPA, to NV Kaktovik, re: Letter of 2/18/10 Consultation and Information
GG-10	3/08/2010	Email from Bernice Kaigelak, NVN, to Catherine Villa, EPA, re: March 17, 2010 – Government to Government
GG-11	3/08/2010	Email from Catherine Villa, EPA, to Native Village, re: March 17, 2010 – Government to Government Att. 1: Public Information Sheet Att. 2: Permit to Construct
GG-12	3/10/2010	Email from Tami Fordham, EPA, to Price Leavitt, ICAS, re: Informational Meeting and Government-to-Government Invitation on the Arctic GP

November 14, 2011 Page 173 of 197

EPA Exhibit Number	Date	Document Title
GG-13	3/15/2010	Email from Tami Fordham, EPA, to Price Leavitt, ICAS, re: Government-to-Government Consultation, Friday, March 19 th .
GG-14	3/23/2010	Email from Tami Fordham, EPA, to Native Village, re: Shell Beaufort PSD – Government-to-Government Consultation Att. 1: 2/18/10 Letter from Rick Albright, EPA, to Bernice Kaigelak, Native Village of Nuiqsut, re: Shell Offshore Inc.'s Outer Continental Shelf Air Permit Application and Proposed Permit for Oil and Gas Exploratory Drilling in the Beaufort Sea Att. 2: 2/17/10 Proposed Air Permit for Beaufort Att. 3: Permit to Construct

Return to Section GG

Return to Table of Contents

November 14, 2011 Page 174 of 197

Section H: Initial Proposed Chukchi Permit (proposed August 20, 2009)

EPA	1100000	d Chukem Permit (proposed August 20, 2009)
Exhibit Number	Date	Document Description
H-1	8/15/2009	Shell Gulf of Mexico Chukchi R10OCSPSD-AK-09-01 Mailing List
H-2	8/17/2009	Letters from Nancy Helm, EPA R10, to City of Barrow, Point Lay Library, City Of Wainwright, City of Point Hope, and City of Atqasuk re: Permit Record Materials for Public Display
H-3	8/20/2009	Proposed Permit, Permit No. R10OCS/PSD-AK-09-01
H-4	8/20/2009	Statement of Basis for Proposed Permit (dated 8/14/09)
H-5	8/20/2009	Statement of Basis Appendix A
Н-6	8/20/2009	Statement of Basis Appendix B
H-7	8/20/2009	Statement of Basis Appendix B: Figures and Tables
H-8	8/20/2009	Air Permit Information Sheet, Air Quality Permit proposed to Shell Gulf of Mexico
H-9	8/20/2009	Public Notice for Air Quality Permit Proposed for Shell Gulf of Mexico Inc. (Chukchi Sea)
H-10	8/20/2009	EPA R10 Web Page Screen Shot of Public Comment Opportunities for Proposed Chukchi Air Permit, http://yosemite.epa.gov/R10/AIRPAGE.NSF/webpage/Public+Comment+Opportunities/
H-11	8/20/2009	EPA R10 Web Home Page Screen Shot of Public Notice for Chukchi Sea Proposed Air Quality Permit Public Hearings and Information Meetings in Alaska, http://www.epa.gov/r10earth/
H-12	8/20/2009	EPA R10 Air Permit Web Page Screen Shot of Public Notice of Chukchi Sea Air Permit http://yosemite.epa.gov/R10/airpage.nsf/Permits/chukchiap/
H-13	8/20/2009	EPA R10 Outer Continental Shelf (OCS) Air Permits Web Page Screen Shot of Public Notice of Proposed Chukchi Sea Permit, http://yosemite.epa.gov/R10/AIRPAGE.NSF/Permits/ocsap/

November 14, 2011 Page 175 of 197

EPA Exhibit Number	Date	Document Description
H-14	8/20/2009	Affidavit of Publication in Anchorage Daily News: State of Alaska, Third Judicial District, re: Public Comment Att.: Air Quality Permit Proposed for Shell Gulf of Mexico Inc. to Operate the Frontier Discoverer Drillship in the Chukchi Sea, Alaska; Public Comment Period August 20 – October 5, 2009
H-15	8/21/2009	Email from Rebecca Smith to Suzanne Skadowski, EPA R10 Re: EPA Public Notice: Air Quality Permit proposed for Shell Oil/Gas exploratory drilling in Chukchi Sea
H-16	8/24/2009	Email from Suzanne Skadowski, EPA R10, to Claire Fishwick Re: EPA Public Notice: Air Quality Permit proposed for Shell Oil/Gas exploratory drilling in Chukchi Sea
H-17	8/24/2009	Email from Claire Fishwick to Suzanne Skadowski Re: EPA Public Notice: Air Quality Permit proposed for Shell oil/gas exploratory drilling in Chukchi Sea
H-18	9/18/2009	Fax from Reanna Norris to Katherine O'Hara re Affidavit and Tear Sheets for Publication in the Arctic Sounder
H-19	9/23/2009 (posted 8/21-2009)	ADEC Public Notices Web Screenshot, http://www.dec.state.ak.us/public_notices.htm
H-20	9/23/2009 (posted 8/21-2009)	ADEC Air Quality Permit Proposed to Shell Gulf of Mexico Web Screenshot, http://www.dec.state.ak.us/air/ap/docs/EPA%20Shell%20ChukchiSea.pn.htm
H-21	9/23/2009	Barrow, AK Public Hearing: Attendance Record on Proposed air Quality Permit for Shell Oil & Gas Exploration in the Chukchi Sea
H-22	9/23/2009	U.S. EPA, Public Hearing, Proposed Air Quality Permit, Shell Chukchi Sea Oil and Gas Exploration Drilling, Barrow, AK Transcript
H-23	9/25/2009	EPA Public Hearing, Anchorage Alaska: Sign-In sheet for those wishing to comment
H-24	9/25/2009	Anchorage, AK Public: Attendance Record on Proposed Air Quality Permit for Shell Oil & Gas Exploration in the Chukchi Sea
H-25	9/25/2009	U.S. EPA, Public Hearing, Proposed Air Quality Permit, Shell Chukchi Sea Oil and Gas Exploration Drilling, Anchorage, AK Transcript

November 14, 2011 Page 176 of 197

EPA Exhibit		
Number	Date	Document Description
Н-26	09/2009	Materials presented at Public Information meetings in Barrow, AK on September 23, 2009 and Anchorage, AK on September 25, 2009: EPA OCS/PSD Permit for Shell Chukchi Sea Exploration Drilling, Posters
H-27	09/2009	Materials presented at Public Information meetings in Barrow, AK on September 23, 2009 and Anchorage, AK on September 25, 2009: OCS/PSD Permit for Shell Chukchi Sea Exploration Drilling Program - Frontier Discoverer: an Overview
H-28	10/2009	Notice of Public Comment Period for Air Quality Permit Proposed for Shell Gulf of Mexico, Inc. Extended to October 20, 2009.
H-29	10/2009	Screen Shot of EPA Region 10 website showing the Public Comment Period Extended to October 20, 2009.
H-30	10/2/2009	Publication Notice in the Anchorage Daily News, Public Comment Period Extended to October 20, 2009
H-31	10/8/2009	Copy from www.thearcticsounder.com Notice of Publication extending the Public Comment Period to October 20, 2009

Return to Section H

Return to Table of Contents

November 14, 2011 Page 177 of 197

Section I: Public Comments on August 2009 Initial Proposed Chukchi Permit

EPA		ts on August 2009 Initial Froposed Chukem Fernit
Exhibit		
Number	Date	Document Description
I-1	9/17/2009	Shell Comments on the August 2009 Proposed Discoverer / Chukchi OCS/PSD Permit to Construct and Wainwright Near-Term Ambient Air Quality Monitoring Program Third Quarter Data Report May through July 2009. (Note: does not include attachments. Attachments can be found in Section 1, Application)
I-2	9/22/2009	Cora Akpik to EPA Re: Public Comment on Chukchi Permit
I-3	9/22/2009	Marjorie Argashuk to EPA Re: Public Comment on Chukchi Permit
I-4	9/25/2009	Linda Leary to EPA Re: Public Comment on Chukchi Permit
I-5	9/25/2009	Stephen Connelly email to EPA Re: Public Comment on the Chukchi Permit
I-6	9/26/2009	Brian Benson email to EPA Re: Public Comment on the Chukchi Permit
I-7	9/28/2009	Doreen Lampe ICAS to Suzanne Skadowski Re: Govt to Govt workshop in Barrow, Ak comments for Shell Frontier Discoverer permit
I-8	9/28/2009	Heath Faulkner email to EPA Re: Public Comment on the Chukchi Permit
I-9	9/28/2009	Richard Faulker email to EPA Re: Public Comment on the Chukchi Permit
I-10	9/28/2009	Erik Grafe email and letter attachment Re: Public Comment on the Chukchi Permit
I-11	9/28/2009	Kevin L. Gray email to EPA Re: Public Comment on the Chukchi Permit
I-12	9/28/2009	Iris Oktollik email and letter to EPA from Native Village of Point Hope Re: Public Comment on the Chukchi Permit

November 14, 2011 Page 178 of 197

EPA Exhibit	7	
Number	Date	Document Description
I-13	9/28/2009	Carl Portman email and letter to EPA from Resource Development Council Re: Public Comment on the Chukchi Permit
I-14	9/28/2009	Barrie Pritchard email to EPA Re: Public Comment on the Chukchi Permit
I-15	9/28/2009	Earl Rude email to EPA Re: Public Comment on the Chukchi Permit
I-16	9/28/2009	Cheryl Thyng email to EPA Re: Public Comment on the Chukchi Permit
I-17	9/28/2009	Email from Jeff Turner for Representative Charisse Millett letter to EPA Re: Public Comment on the Chukchi Permit
I-18	9/28/2009	Terry Walker email to EPA Re: Public Comment on the Chukchi Permit
I-19	9/28/2009	Daryl Woods email to EPA Re: Public Comment on the Chukchi Permit
I-20	9/29/2009	Dan Demarco email to EPA Re: Public Comment on the Chukchi Permit
I-21	9/29/2009	Kristi Frankson email to EPA Re: Public Comment on the Chukchi Permit
I-22	9/29/2009	Bill Griffith email to EPA Re: Public Comment on the Chukchi Permit
I-23	9/30/2009	Dave Harbour email to EPA Re: Public Comment on the Chukchi Permit
I-24	9/30/2009	Micky Becker email to EPA Re: Public Comment on the Chukchi Permit
I-25	9/30/2009	Chuck Becker email to EPA Re: Public Comment on the Chukchi Permit

November 14, 2011 Page 179 of 197

EPA Exhibit		
Number	Date	Document Description
I-26	9/30/2009	Michael Brogan email to EPA Re: Public Comment on the Chukchi Permit
I-27	9/30/2009	Dave Cruz email to EPA Re: Public Comment on the Chukchi Permit
I-28	9/30/2009	John Mackinnon, Associated General Contractors of Alaska, email to EPA Re: Public Comment on the Chukchi Permit
I-29	10/1/2009	John Ellsworth Alaska Frontier Constructors Comments to EPA Re: Support Issuance of the Air Quality Permit for Shell's Chukchi Sea Leases
I-30	10/1/2009	Evan J Griffith, EJG Enterprises, to EPA Re: Support Issuance of the Air Quality Permit for Shell's Chukchi Sea Leases
I-31	10/1/2009	Chris Birch email with attachment to EPA Re: Public Comment on the Chukchi Permit
I-32	10/1/2009	Alicia Kerr email with attached letter to EPA Re: Public Comment on the Chukchi Permit
I-33	10/1/2009	Cristin Meznarich email to EPA Re: Public Comment on the Chukchi Permit
I-34	10/1/2009	Alicia Kerr email with attached letter from Betty East-Up Smith to EPA Re: Public Comment on the Chukchi Permit
I-35	10/1/2009	Alicia Kerr email with attached letter from Lee Smith to EPA Re: Public Comment on the Chukchi Permit
I-36	10/1/2009	Pete Stokes email to EPA Re: Public Comment on the Chukchi Permit
I-37	10/1/2009	Thomas B. Wood email to EPA Re: Public Comment on the Chukchi Permit
I-38	10/2/2009	James R. Winegarner Alaska Brooks Range Petroleum Corp to EPA Re: Support Issuance of Air Quality Permit for Shell's Chukchi Sea Leases

November 14, 2011 Page 180 of 197

EPA Exhibit Number	Date	Dogument Description
Nullibel	Date	Document Description
I-39	10/2/2009	John Goll from Alaska Minerals Management Service to EPA Re: Public Comment on Chukchi Permit
I-40	10/2/2009	Air Liquide Comments to EPA Re: Support Issuance of the Air Quality Permit for Shell's Chukchi Sea Leases
I-41	10/2/2009	Dave Scarbrough, Air Logistics, Comments to EPA Re: Support Issuance of the Air Quality Permit for Shell's Chukchi Sea Leases
I-42	10/2/2009	James R. Winegarner Alaska Brooks Range Petroleum Corp Email Comments to EPA Re: Support Issuance of Air Quality Permit for Shell's Chukchi Sea Leases
I-43	10/2/2009	Chris Ledgerwood NANUQ Inc Comments to EPA Re: Support Issuance of the Air Quality Permit for Shell's Chukchi Sea Leases
I-44	10/2/2009	Frank G Weiss III Alaska ANVIL Inc to EPA Re: Air Quality Permit for Shell's Chukchi Sea Leases, Alaska Anvil and our employee support issuance
I-45	10/3/2009	Scott Thorson Email Comments to EPA Re: Shell's Air Quality Permit
I-46	10/5/2009	Roger Jenkins to EPA Re: Public Comment on Chukchi Permit
I-47	10/5/2009	Steven C. Borell from Alaska Miners Association to EPA Re: Shell Air Quality Permit for Chukchi Sea Oil & Gas Exploration
I-48	10/7/2009	Scott E. Hawkins to EPA Re: Supporting the Air Quality Permit for Shell's Chukchi Sea Leases
I-49	10/8/2009	Shell Gulf of Mexico Inc. to EPA Re: September 17, 2009 Comments on the August 2009 Proposed Discoverer/ Chukchi OCS/PSD Permit to Construct
I-50	10/8/2009	Steel Co. Comments to EPA Re: Support Issuance of the Air Quality Permit for Shell's Chukchi Sea Leases
I-51	10/9/2009	Braun to EPA Re: Chukchi Sea Air Quality Permit (Frontier Discoverer) Email Comments

November 14, 2011 Page 181 of 197

EPA Exhibit		
Number	Date	Document Description
I-52	10/13/2009	Sharon E. Anderson letter to Suzanne Skadowski Re: I urge you to issue the Air Quality Permit for Shell's Chukchi Sea leases
I-53	10/13/2009	Mark C. Nelson, ASRC Energy Service, letter to Suzanne Skadowski Re: Comment on EPA Region 10 Proposes OCS Prevention of Significant Deterioration (PSD)
I-54	10/14/2009	Chris Bell, Account Manager for PCE Pacific, Inc., email and attached letter Re: Public Comment on the Chukchi Permit
I-55	10/14/2009	Bob Cox email to EPA Re: Public Comment on the Chukchi Permit
I-56	10/14/2009	Joe Dygas email to Nair Re: Public Comment on the Chukchi Permit
I-57	10/15/2009	Lon G. Wilson email to EPA Re: Public Comment on the Chukchi Permit
I-58	10/16/2009	Brian Tomlinson letter toe EPA Re: Chukchi Sea Air Permit-Shell Gulf of Mexico, Inc.
I-59	10/17/2009	Wayne A. Stevens email and attached letter from the AK State Chamber of Commerce to EPA Re: Public Comment on the Chukchi Permit
I-60	10/19/2009	Bill Noll email to Suzane Skadowski Re: Public Comment on the Chukchi Permit
I-61	10/19/2009	John Dittrich email to EPA Re: Public Comment on the Chukchi Permit
I-62	10/19/2009	Joe Dygas email to EPA Re: Public Comment on the Chukchi Permit
I-63	10/19/2009	Steve Pratt email to Suzanne Skadowski Re: Public Comment on the Chukchi Permit
I-64	10/20/2009	Brendan Cummings email and attached letter from the Center for Biological Diversity Re: Draft OCS PSD Permit for Shell Gulf of Mexico, Inc. for Exploration Drilling in the Chukchi Sea

November 14, 2011 Page 182 of 197

EPA Exhibit	T	
Number	Date	Document Description
I-65	10/20/2009	James Gilbert letter from Udelhoven Oilfield System Services, Inc. Re: Public Comment on the Chukchi Permit
I-66	10/20/2009	Erik Grafe email and letter attachment from Earthjustice Re: Comments to proposed permit for Shell's Chukchi Sea Drilling
I-67	10/20/2009	Kirk Lilley, PLLC. email and attached letter from Shell Offshore, Inc. in response to Earthjustice's letter dated 8/10/2009 concerning Shell Chukchi and Beaufort Sea Permit Applications
I-68	10/20/2009	Kirk Lilley, PLLC. email and attached letter from Shell Offshore, Inc. providing a brief addition to the supplemental comments of 10/20/2009
I-69	10/20/2009	Iris Lane-Oktollik email and attached letter from the Native Village of Point Hope Re: Draft OCS PSD Permit for Shell
I-70	10/20/2009	Tanya Sanerib emails and attachments of comments from the Alaska Eskimo Whaling Commission, Inupiat Community of the Arctic Slope and North Slope Borough on Shell's Chukchi OCS PSD permit
I-71	10/20/2009	Rodger G. Steen email and attached letter from Shell Gulf of Mexico, Inc. Re: Shell Gulf of Mexico, Inc. Supplemental Comments on the August 2009 Proposed Discover/Chukchi OCS/SD Permit to Construct
I-72	10/20/2009	Brad Thomas email and attached letter from ConocoPhillips Re: Comments on the Air Quality Permit Proposed for Shell Gulf of Mexico Inc.

Return to Section I

Return to Table of Contents

November 14, 2011 Page 183 of 197

Section J: Modified Proposed Chukchi Permit (proposed January 8, 2010)

EPA		sed Chukchi Permit (proposed January 8, 2010)
Exhibit		
Number	Date	Document Description
J-1	1/8/2009	Modified Proposed Permit – Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct, Shell Gulf of Mexico, Inc.
J-2	1/8/2009	Modified Statement of Basis for Proposed Permit – Outer Continental Shelf Prevention of Significant Deterioration Permit to Construct, Shell Gulf of Mexico, Inc. (dated 01/08/2009)
J-3	1/8/2010	Chukchi Air Permit Public Notice and Information Sheet
J-4	1/8/2010	E-mail sent by Suzanne Skadowski regarding Public Notice of Chukchi Air Permit
J-5	1/8/2010	EPA website screenshot of Public Notice of Chukchi Air Permit
J-6	1/8/2010	Mailing List for Chukchi Air Permit, January 2010 New Modified Permit
J-7	1/8/2010	Public Notice on the Chukchi Air Permit, Comment Period: January 8 – February 17, 2010
J-8	1/8/2010	Anchorage Daily News EPA Notice of Public Comment Period for Shell Chukchi Air Permit
J-9	1/8/2010	Email from Suzanne Skadowski to Siobhan Hughes Re_ Shell's Chukchi permit
J-10	1/11/2010	Email from Suzanne Skadowski, Region 10 EPA, to Susan Herrington, AK Business Magazine, Re: Mailing List About OCS Permits
J-11	1/13/2010	Email from Suzanne Skadowski, Region 10 EPA, to Ira Gudruk, NSB, Re: Shell Chukchi Sea Air Permit – Public Comment Period Open Now
J-12	1/14/2010	The Arctic Sounder EPA Notice of Public Comment Period for Shell Chukchi Air Permit
J-13	1/26/2010	Email from Suzanne Skadowski, Region 10 EPA, to Ukallaysaaq Tom Okleasik, Northwest Arctic Borough, Re: (EPA Public Hearing for the Shell Chukchi Air Permit)

November 14, 2011 Page 184 of 197

EPA		
Exhibit Number	Date	Document Description
J-14	1/27/2010	Email from Suzanne Skadowski, Region 10 EPA, to Sophie Henry, Village Liaison, Inupiat Community of the Arctic Slope, Re: Scheduling Informational Conference Call on EPA Air Permit-Feb 10?
J-15	2/1/2010	Email from Suzanne Skadowski, Region 10 EPA, to Northstar 4450, Cheryl Brower, Gordon Brower, et al, North Slope Borough, Re: EPA Shell Chukchi Air Permit Teleconference Information Meeting Feb 10
J-16	2/2/2010	Email from Suzanne Skadowski, Region 10 EPA, to Martha Kagak, Sharon File, Shirley Kagak, Fredricka m Stalker, Marie Tracey, et al, North Slope Borough, Re: EPA Shell Chukchi Air Permit Teleconference Information Meeting Feb 10 1:00pm – Duplicate for those who may have missed the first one Attachment: Teleconference Notice Flyer and Public Hearing Announcement for Barrow, Alaska
J-17	2/3/2010	Email from Suzanne Skadowski, Region 10 EPA, to ICAS.Natural, Re: EPA Shell Chukchi Air Permit Teleconference Information Meeting Feb 10 at 1:00PM
J-18	2/5/2010	Email from Suzanne Skadowski, Region 10 EPA, to Gary Mendivil, DEC, Re: Barrow Hearing for Shell Chukchi Sea Air Permit
J-19	2/9/2010	Email from Suzanne Skadowski, Region 10 EPA, to Mike, KBRW, Re: PSA for EPA Public Meeting/Call on Feb 10
J-20	2/16/2010	Email from Suzanne Skadowski, Region 10 EPA, to Amos Nashookpuk, Re: REMINDER: EPA public hearing teleconference tonight at 6:00 p.m.
J-21	2/16/2010	Email from Suzanne Skadowski, Region 10 EPA, to Martha Kagak, etc, North Slope Borough, Re: REMINDER: EPA public hearing teleconference tonight at 6:00 p.m.
J-22	2/16/2010	Email from Suzanne Skadowski, Region 10 EPA, to tokleasik, Re: REMINDER: EPA public hearing teleconference tonight at 6:00 p.m.
J-23	2/16/2010	Attendance Sign In Sheet – Public Hearing - 2/16/2010 –Barrow, Alaska Shell Air Permit- Chukchi Sea
J-24	2/16/2010	Testimony Sign-In; Public Hearing, EPA Proposed Air Quality Permit for Shell Oil and Gas Exploration in the Beaufort Sea [sic] February 16,2010 -6:00 pm -Barrow, Alaska

November 14, 2011 Page 185 of 197

EPA Exhibit Number	Date	Document Description
J-25	3/12/2010	Affidavit of Publication from The Anchorage Daily News

Return to Section J

Return to Table of Contents

November 14, 2011 Page 186 of 197

Section K: Public Comments on January 2010 Proposed Chukchi OCS/PSD Permit

Section K: Public Comments on January 2010 Proposed Chukchi OCS/PSD Permit		
EPA Exhibit Number	Date	Document Description
K-1	1/8/2010	Email from Thomas Wood to EPA, Re: Give them the permit
K-2	1/11/2010	E-mail from Ukallaysaaq Tom Okleasik, Northwest Arctic Borough to Pat Nair, EPA and Suzanne Skadowski, EPA regarding Communities can comment on Shell permit
K-3	1/15/2010	Email from Richard Braun to EPA, Re: Issuance of permits to Shell
K-4	2/1/2010	Susan Childs, Shell Gulf of Mexico, Inc. letter to EPA Re: Comments on January 2010 Proposed Discoverer/Chukchi OCS/PSD Permit to Construct
K-5	2/2/2010	Email from Steven B. to Suzanne Skadowski RE: Beaufort and Chukchi Sea Permits
K-6	2/11/2010	Email from Charles Okakok to EPA, Re: Shell permit
K-7	2/12/2010	Letter from John Goll of MMS to EPA, Re: New Modified Air Quality Permit Proposed for Shell to Operate the Frontier Discoverer Drillship in the Chukchi Sea, Alaska-MMS comments
K-8	2/16/2010	Email from Georgia Skjelstad to EPA, Re: Comment-Proposed Shell OCS Permit (as issued 1/8/2010)
K-9	2/16/2010	Transcript of Testimony at 2/16/10 Public Hearing in Barrow, Alaska on Proposed Permit
K-10	2/17/2010	Letter from Susan Childs to EPA, Re: Shell Additional Comments on the January 2010 Proposal Discoverer/Chukchi OSC/PSD Permit to Contract
K-11	2/17/2010	Letter from Geoffrey Haddad at ConocoPhillips to EPA, Re: OCS PSD Permit Number: R10OCS/PSD-AK-09-01 with attachment
K-12	2/17/2010	Letter from Alaska Wilderness League, Audubon Alaska, Center for Biological Diversity, Earthjustice, Natural Resources Defense Council, Northern Alaska Environmental Center, Pacific Environment, Ocean Conservancy, Oceana, Sierra Club, Redoil, and World Wildlife Fund to EPA Region 10, Re: Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit Number R10OCS?PSD-AK-09-01

November 14, 2011 Page 187 of 197

EPA Exhibit Number	Date	Document Description
Tullioci	Dute	Document Description
K-13	2/17/2010	Email from UkallaysaaqTom Okleasik, Northwest Arctic Borough, to EPA, Re: Comments Shell Chukchi Air Permit with Attachments
K-14	2/17/2010	Letter from Vera Pardee to EPA, Re: New Modified Air Quality Permit Proposed for Shell to Operate the Frontier Discoverer Drillship in the Chukchi Sea, Alaska: Permit Number R10OCS/PSD-Ak-09-01
K-15	2/17/2010	Email from Gary Mandivil to EPA, Re: Comment from ADEC on EPA PSD Permit for Shell's OCS Activities in the Chukchi Sea
K-16	2/17/2010	Letter from Alaska Eskimo Whaling Commission, Inupiat Community of the Arctic Slope, and North Slope Borough to Pat Nair, Nancy Helm, and EPA Region 10, Re: Shell Gulf of Mexico/Shell Offshore Inc.'s Application for a Chukchi Sea Clean Air Act Permit with Attachments 1 through 37. Attachments 13 and 19 not printed. See Chukchi Administrative Record Compact Disc at the following file path: K - Public Comments on January 2010 Proposed Chukchi OCS/PSD Permit\K16

Return to Section K

Return to Table of Contents

November 14, 2011 Page 188 of 197

Section L: Final Chukchi Permit

EPA	mai Chukchi i	
Exhibit	Data	Dammant Damintian
Number	Date	Document Description
L-1	3/31/2010	Final Chukchi Permit Signed March 31, 2010
L-2	3/31/2010	Response to Comments on OCS/PSD Permit
L-3	3/31/2010	Announcement of Final Decision
L-4	3/31/201c	Chukchi Final Permit Redline
L-5	3/31/2010	Shell Chukchi Final Permit Summary of Changes
L-6	3/31/2010	Recipient Mailing List of Announcement, Final Permit, and Response to Comment
L-7	3/31/2010	Recipient Mailing List of Announcement (Repositories, Tribal and Other Government Agencies, and Interested Persons)
L-8	3/31/2010	Recipient Mailing List of Announcement (Commenters on August 20, 2009 Proposed Permit)
L-9	4/5/2010	Email to Jack Schaefer, Commenter, Re: Final Decision To Issue an OCS/PSD Permit to Shell Gulf of Mexico Inc. for Exploratory Drilling in the Chukchi Sea
L-10	4/5/2010	Email for Georgia Skjelstad, Commenter, Re: Final Decision To Issue an OCS/PSD Permit to Shell Gulf of Mexico Inc. for Exploratory Drilling in the Chukchi Sea
L-11	4/5/2010	Email to Ridgeburner, Commenter, Re: Final Decision To Issue an OCS/PSD Permit to Shell Gulf of Mexico Inc. for Exploratory Drilling in the Chukchi Sea
L-12	4/5/2010	Email to Richard Braun, Commenter, Re: Final Decision To Issue an OCS/PSD Permit to Shell Gulf of Mexico Inc. for Exploratory Drilling in the Chukchi Sea
Return to Section I Return to Table of Contents		

Return to Section L

Return to Table of Contents

November 14, 2011 Page 189 of 197

Section MM: ADEC Rules/Regulations

	: ADEC Rules	Negulations
EPA		
Exhibit	D.	D 4.T:41
Number	Date	Document Title
MM-1	8/25/2004	ADEC References Attachment 1:ADEC: Standard Permit Condition I – Emission Fees Attachment 2:ADEC: Standard Permit Condition II – Air Pollution Prohibited Attachment 3: ADEC: Standard Operating Permit Condition VI – Good Air Pollution Control Practices Attachment 4: ADEC: Standard Operating Permit Condition XI – SO2 Emissions Attachment 5:ADEC: Standard Operating Permit Condition XII – SO2 Material Balance Calculation
MM-2	8/20/2008	ADEC References Attachment 1:ADEC: Standard Permit Condition III – Excess Emissions and Permit Deviation Reports Attachment 2:ADEC: Standard Permit Condition IV – Notification Form Attachment 3:ADEC: Standard Permit Condition IX – Visible Emissions and Particulate Matter Monitoring Plan for Liquid-Fired Emission Units
MM-3	11/9/2008	Dept. of Environmental Conservation, 18 AAC 50, Air Quality Control, As Amended through November 9, 2008
MM-4	11/9/2008	State of Alaska, Outer Continental Shelf Air Regulations, 40 CFR Part 55, Requirements Applicable to OCS Source
MM-5	3/03/2009	Fed. Reg. Vol. 74, No. 40, Proposed Rules, 40 CFR Part 55 [EPA-R10-OAR-2009-0111; FRL-8777-6] Outer Continental Shelf Air Regulations Consistency Update for Alaska, Proposed Rule-Consistency Update
MM-6	4/02/2009	Letter from Edward S. Itta, Mayor, North Slope Borough, to Natasha Greaves, EPA, re: Docket ID Number EPA-R10-OAR- 2009-0111, Outer Continental Shelf Air Regulations Consistency Update for Alaska
MM-7	4/13/2009	Email from Nancy Helm, EPA, to Kara Kolash and Jonathan Jemming, North Slope, re: Public Comment Period for OCS Air Regulations Consistency Update for Alaska,
MM-8	4/29/2009	Fed. Reg. Vol. 74, No. 81, Proposed Rule, 40 CFR Part 55 [EPA-R10-OAR-2009-0111; FRL-8898-8] Outer Continental Shelf Air Regulations Consistency Update for Alaska, Proposed Rule-Reopening of Comment Period

November 14, 2011 Page 190 of 197

EPA Exhibit Number	Date	Document Title
MM-9	5/13/2009	Email from Jonathan Jemming, North Slope, to Natasha Greaves, EPA, re: North Slope Borough's Supplemental Comments Att. 1: 5/13/09 Letter from Edward S. Itta, Mayor, to Natasha Greaves, EPA, re: Docket ID Number EPA-R10-OAR-2009-0111, Outer Continental Shelf Air Regulations Consistency Update for Alaska Att. 2: 4/2/09 Letter from Edward S. Itta, Mayor, to Natasha Greaves, EPA, re: Docket ID Number EPA-R10-OAR-2009-0111, Outer Continental Shelf Air Regulations Consistency Update for Alaska
MM-10	6/18/2009	Dept. of Environmental Conservation, 18 AAC 50, Air Quality Control, as Amended through 6/18/09
MM-11	1/21/2010	Fed. Reg. Vol. 75, No.13, Rules and Regulations, 40CFR Part 55 [EPA-R10-OAR-2009-0799; FRL-9095-8] Outer Continental Shelf Air Regulations Consistency Update for Alaska, Direct Final Rule
MM-12	1/21/2010	Fed. Reg. Vol. 75, No. 13, Rules and Regulations 40CFR Part 55 [EPA-R10-OAR-2009-0111;FRL-9095-9] Outer Continental Shelf Air Regulation Consistency Update for Alaska, Final Rule
MM-13	1/21/2010	Fed. Reg. Vol.75, No.13, Proposed Rule, 40 CFR Part 55 [EPA-R10-OAR-2009-0799; FRL-9095-7] Outer Continental Shelf Air Regulations Consistency Update for Alaska, Proposed Rule
MM-14	3/04/2010	Fed. Reg. Vol. 75, No. 42, Rules and Regulations, 40 CFR Part 55, [EPA-R10-PAR-2009-0799; FRL-9123-11], Final Rule Correction

Return to Section MM

Return to Table of Contents

November 14, 2011 Page 191 of 197

Section NN: Proposed Beaufort Permit

EPA Exhibit	Proposed Bea	
Number	Date	Document Title
NN-1	2/12/2010	Public Hearing Notice – Air Permit Application to Operate the Frontier Discoverer Drillship and Fleet – Beaufort Sea, Alaska
NN-2	2/12/2010	EPA Public Notice on ADEC website
NN-3	2/16/2010	Shell Beaufort Mailing List
NN-4	2/17/2010	Beaufort Permit Information Sheet
NN-5	2/17/2010	U.S. Express Mail Tracking Numbers
NN-6	2/17/2010	Beaufort Permit Public Notice Advertisement
NN-7	2/17/2010	EPA Public Notice on ADEC website
NN-8	2/17/2010	Shell Beaufort OCS/PSD Air Permit E-Mail List for 2/17/10 Public Notice
NN-9	2/17/2010	Shell Beaufort Proposed Permit
NN-10	2/17/2010	U.S. EPA Statement of Basis for Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit
NN-11	2/17/2010	Shell Beaufort Sea Statement of Basis Appendix A
NN-12	2/18/2010	EPA Notice of Public Hearings and Comment Period for Beaufort Permit Advertisement Notice
NN-13	2/18/2010	EPA Notice of Public Hearings and Comment Period for Beaufort Permit Published in the Arctic Sounder

November 14, 2011 Page 192 of 197

EPA Exhibit Number	Date	Document Title
NN-14	2/24/2010	Email from Jonathan Jemming, NSB, to Region 10EPA, Re: Camden Bay Proposed Air Permit Request Attachment: Letter from Edward S. Itta, Mayor, North Slope Borough, to Suzanne Skadowski, EPA, Re: Shell Gulf of Mexico/Shell Offshore Inc.'s Application for a Camden Bay Clean Air Act Permit
NN-15	2/25/2010	EPA Notice of Public Hearings and Comment Period for Beaufort Permit Published in the Arctic Sounder
NN-16	3/3/2010	Shell Beaufort Mailing List
NN-17	3/12/2010	Affidavit of Publication of Public Hearings and Comment Period on 2/12/10 by the Anchorage Daily News
NN-18	3/12/2010	Affidavit of Publication of Public Hearings and Comment Period on 2/17/10 by the Anchorage Daily News

Return to Section NN

Return to Table of Contents

November 14, 2011 Page 193 of 197

Section OO: Public Comments on Beaufort OCS/PSD Proposed Permit

	T ublic Collin	lents on Beautort OCS/PSD Proposed Permit
EPA		
Exhibit Number	Data	Decoment Description
Number	Date	Document Description Email from Jonathan Jemming to Suzanne Skadowski, Subject
00-1	2/24/2010	Camden Bay Proposed Air Permit Request with attached Letter from Edward S. Itta RE: Shell Gulf of Mexico/Shell Offshore Inc.'s Application for a Camden Bay Clean Air Act Permit.
OO-2	2/24/2010	Letter from Edward S. Itta RE: Shell Gulf of Mexico/Shell Offshore Inc.'s Application for a Camden Bay Clean Air Act Permit.
OO-3	3/1/2010	Letter from Richard Albright, EPA, to Edward S. Itta, Mayor, North Slope Borough, re: Proposed Air Permit to Shell Offshore Inc. for oil and gas exploration on the Beaufort Sea outer continental shelf – Request to Extend the Public Comment Period
OO-4	3/2/2010	Email from Janis Hastings, EPA, to Harold Curran, re: NSB 15-day comment extension request – EPA response letter Att. 1: 3/1/10 Letter from Richard Albright, EPA, to Edward S. Itta, Mayor, North Slope Borough, re: Proposed Air Permit to Shell Offshore Inc. for oil and gas exploration on the Beaufort Sea outer continental shelf – Request to Extend the Public Comment Period
OO-5	3/3/2010	Email from Suzanne Skadowski to Jonathan Jemming, Subject Camden Bay Proposed Air Permit Request with attached Letter from Richard Albright, EPA, to Edward S. Itta, Mayor, North Slope Borough, re: Proposed Air Permit to Shell Offshore Inc. for oil and gas exploration on the Beaufort Sea outer continental shelf – Request to Extend the Public Comment Period
OO-6	3/3/2010	Letter from Nancy Helm, EPA, to Jonathan Jemming, re: Two Copies of Administrative Record for Beaufort Sea Permit
OO-7	3/16/2010	Email from Suzanne Skadowski to Jonathan Jemming Re: Camden Bay Proposed Air Permit Request for Appendices to Statement of Basis
OO-8	3/16/2010	Public Hearing Sign-in Sheets for 3/16/10 to 3/18/10
OO-9	3/16/2010	Kaktovik Public Hearing Transcript on Beaufort
OO-10	3/17/2010	Nuqsut Public Hearing Transcript on Beaufort
OO-11	3/17/2010	Leah Frankson Beaufort Comment

November 14, 2011 Page 194 of 197

EPA Exhibit Number	Date	Document Description
OO-12	3/18/2010	Barrow Public Hearing Transcript on Beaufort
OO-13	3/18/2010	Comments from ADEC on Shell Beaufort
OO-14	3/18/2010	Delbert Rexford From Arctic Slope Comment on Draft Proposed Beaufort Permit
OO-15	3/22/2010	Conservation Groups' Comments Attachment: Letter from Conservation Groups to EPA Region 10, Re: Proposed Continental Shelf Prevention of Significant Deterioration Permit Number R10OCS/PSD-AK-2010-01
OO-16	3/22/2010	Comments from Native Village of Point Hope Attachment: Letter from Lilly Tuzroyluke, Executive Director, Native Village of Point Hope to Region 10 EPA, Re: Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit Number R10
OO-17	3/22/2010	Email from Gene Pavia, UMIAQ, to Region 10 EPA, Re: Shell Beaufort PSD Permit to Construct No. R10OCS/PSD-AK-2010-01 Comments form Ukpeaguik Inupiat Corporation Attachment: Letter from Anthony E. Edwardsen, Pres., Ukpeagvik Inupiat Corporation, to EPA Region 10, Re: Comments on EPA Region 10 Proposed Outer Continental Shelf (OCS) Prevention of Significant Deterioration (PSD) Permit to Construct No. R10OCS?PSD – AK- 2010 -01 for Shell Offshore, Inc. Frontier Discoverer Drillship Beaufort Sea Exploration Drilling Program, dated February 17, 2010
OO-18	3/22/2010	Email from Linda S. Kuhn, Sr. Council, Anadarko Petroleum Corporation, to Region 10 EPA, Re: Anadarko's Comments on Shell Beaufort OCS/PSD Proposed Permit # R10OCS?PSD-AK-2010-01 Attachment: Letter from Todd Durkee, Manager, Drilling and Completions, Anadarko Petroleum Corporation to Region 10 EPA, Re: OCS PSD Permit Number R10OCS/PSD-AK-2010_01 (Shell Offshore Inc.)

November 14, 2011 Page 195 of 197

EPA Exhibit			
Number OO-19	3/22/2010	Email from Vera Pardee, Center for Biological Diversity, to Region 10 EPA, Re: Comment by Center for Biological Diversity to Shell Beaufort Sea PSD Permit No. R10OCS/PSD Permit No. R10OCS/PSD-AK-2010_01 Attachment: Letter from Vera Pardee, Center for Biological Diversity, to EPA Region 10, Re: Proposed Outer Continental Shelf Prevention of Significant Deterioration Permit to Shell Offshore Inc. – Beaufort Sea, Alaska; Permit No. R10OCS?PSD-AK-2010-01	
OO-20	3/22/2010	Email from Eric Hansen, Environ, to Rick Albright, Region 10 EPA, Re: Shell Comments on Draft Beaufort Sea PSD Permit Attachment: Letter from Susan Childs, Shell, to EPA Region 10, Re: Comments on Proposed PCS PSD Permit # R10OCS/PSD-AK-2010-01 Frontier Discoverer Drillship/Beaufort Sea Exploration Drilling Program	
OO-21	3/22/2010	Email from Tanya Sanerib, Crag Law Center, to Region 10 EPA, Re: AEWC, ICAS, and NSB Comments Shell Beaufort Permits Attachment 1: Letter form Harry Brower, AK Eskimo Whaling Commission, George Edwardsen, President, ICAS, and Edward S. Itta, Mayor, North Slope Borough, to Natasha Greaves, Permit Writer, Region 10 EPA, and Nancy Helms, Federal and Delegated Air Programs Manager, Region 10 EPA, Re: Comment Letter Regarding Shell Gulf of Mexico./Shell Offshore Inc.'s OCS Pre-Construction Air Permit Application for the Beaufort sea Exploration Program, the Draft Permit, and EPA's Statement of Basis for the Draft Permit. Attachment 2: Index of Attachments to AEWC, ICAS and NSB Beaufort OCS/PSD Permit Comments	
OO-22	3/22/2010	Letter from Martin Cohen, Statoil to EPA Re: OCS PSD Permit Number: RIOOCS/PSD-AK-2010-01	
OO-23	3/23/2010	City of Nuiqsut Comment o Draft Beaufort Proposed Permit	
OO-24	3/23/2010	Wilderness Society Comments on Draft Beaufort Permit	
00-25	3/24/2010	Email from Kirk Winges, Environ, to Natasha Greaves, EPA, re: References	
D -4 4- C-	Return to Section OO Return to Table of Contents		

Return to Section OO

Return to Table of Contents

November 14, 2011 Page 196 of 197

Section PP: Final Beaufort Permit

EPA Exhibit Number	Date	Document Description
PP-1	3/31/2010	Shell Chukchi Sea OSC/PSD Permit Response to Comments
PP-2	4/09/2010	Final Shell Beaufort OCS/PSD Permit
PP-3	4/09/2010	Final Beaufort Permit Announcement
PP-4	4/09/2010	Redlined Version of Shell Beaufort OCS/PSD Permit
PP-5	4/09/2010	Shell Beaufort Sea OSC/PSD Permit Response to Comments
PP-6	4/09/2010	Shell Beaufort Final Mailing List
PP-7	4/09/2010	Beaufort Final Mailing List Addendum

Return to Section PP

Return to Table of Contents

November 14, 2011 Page 197 of 197