

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

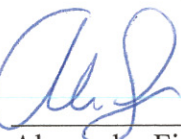
In re:)	
)	
Shell Offshore, Inc.)	
OCS Permit No. R10 OCS030000)	
)	OCS Appeal Nos.
)	11-05, 11-06 & 11-07
)	
Conical Drilling Unit Kulluk)	
)	

**SUBMISSION OF CERTIFIED INDEX TO
THE ADMINISTRATIVE RECORD**

EPA Region 10 (Region 10) hereby submits the Certified Index to the Administrative Record for Region 10's decision to issue the above captioned Outer Continental Shelf/Permit to Construct and Title V Air Quality Operating Permit to Shell Offshore, Inc. The Certified Index for OCS Permit No. R10 OCS030000 has been filed with the Clerk electronically by means of CDX. Four complete electronic copies of the Certified Index and of the entire combined Administrative Record (each copy on a single DVD) are also enclosed.

Dated: December 21, 2011

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that the Certified Index to the Administrative Record for Shell Offshore, Inc. OCS Permit Nos. R10030000 was filed with the Clerk of the Environmental Appeals Board electronically through CDX, along with four complete copies of the Certified Index and the combined Administrative Record in electronic form at the hand delivery address:

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 a complete copy of the Certified Index and the Administrative Record for OCS Permit No. R10030000, OCS Appeal Nos. 11-05, 11-06, & 11-07, was sent in electronic format (one DVD) via first class U.S. certified mail to the following persons. An electronic copy of the Certified Index has also been sent to each of the persons identified below via email:

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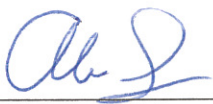
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December 21, 2011

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**BEFORE THE ENVIRONMENTAL APPEALS BOARD
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In re:

Shell Offshore, Inc.

OCS Permit No. R10030000

Conical Drilling Unit Kulluk

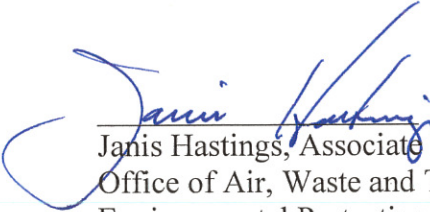
OCS Appeal Nos.

11-05, 11-06, & 11-07

**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 (identified in electronic form as "Shell Kulluk Administrative Record Index – BAH Master List_12.16.2011.pdf") constitutes the combined and consolidated Certified Index to the Administrative Record forming the basis for EPA' Region 10's decision to issue the above-captioned revised Outer Continental Shelf permit to Shell Offshore, Inc.

Dated: December 21, 2011



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

Administrative Record

OCS Permit No. R10 OCS030000
Shell Offshore, Inc. -- Conical Drilling Unit Kulluk
Permit Issued October 21, 2011

Shell Kulluk Administrative Record Index

- A. Application Materials**
- B. Guidance, Background Information, and Technical Analysis**
- C. Correspondence and Communication**
- D. (Intentionally Left Blank)**
- E. Endangered Species Act/Essential Fish Habitat**
- F. Environmental Justice**
- G. Supplemental Government-to-Government Consultation**
- H. Draft Title V Permit**
- I. Public Comments on 2011 Revised Draft Permits**
- J. Final Title V Permit**
- K. COA-ADEC Regulations**

Combined Other Record Documents Index

- BB. Other Guidance, Background Information, and Technical Analysis**
- CC. Other Correspondence and Communication**
- EE. Other Endangered Species Act/Essential Fish Habitat**
- FF. Other Environmental Justice**

GG. Other Government-to-Government Consultation

HH. Other Draft Title V Permit

A. Application Materials

EPA Exhibit Number	Date	Document Description
A-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
A-2	2/28/2011	Kulluk Beaufort Minor Application Cover Letter, from Susan Childs, Shell, to Doug Hardesty, EPA, RE: EPA Outer Continental Shelf (OCS) Operating Permit – Shell Beaufort Sea Alaska Exploratory Drilling Program: Conical Drilling Unit Kulluk
A-3	2/28/2011	EPA Outer Continental Shelf (OCS) Operating Permit Application, Shell Beaufort Sea, Alaska Exploratory Drilling Program: Conical Drilling Unit Kulluk (Part 1), Prepared for Shell Offshore, Inc.
A-4	2/28/2011	Supplement to EPA Outer Continental Shelf (OCS) Operating Permit Application Shell Beaufort Sea, Alaska Exploratory Drilling Program: Conical Drilling Unit Kulluk (Part 2) Prepared for Shell Offshore, Inc.
A-5	5/4/2011	Technical Memorandum, Updates to Air Quality Impact Drillship, Prepared for Pauline Ruddy, Shell, Prepared by Tim Martin, Air Sciences
A-6	5/10/2011	Letter from Sabrina Pryor, Air Sciences, to Dan Meyer, EPA, RE: Shell Offshore Inc. OCS Permit Application, Conical Drilling Unit Kulluk, Beaufort Sea - References (Attachments: 2011-05-10_HARD COPY_Shell OCS Permit App Kulluk - Ref and 2011-05-10_CD COPY_Shell OCS Permit App Kulluk - Ref)
A-7	6/29/2011	Final Application Supplements: <ul style="list-style-type: none"> – Final_Kulluk_Applications_Part1 – Final_Kulluk_Applications_Part2 – Kulluk_Submittals_20110629-ReducedSize – KullukOCSApplication_20110629 – KullukOCSAppLtr_20110629 – Shell_Kulluk_app_and_supp_cover_ltr_20110629
A-8	7/7/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: fuel monitoring questions
A-9	7/13/2011	Kulluk Ice Breaker Additional Modeling Run: <ul style="list-style-type: none"> – 2011-07-13_Email_RE Kulluk Ice Breaker – 2011-07-15_Email_RE Kulluk Ice Breaker – Kulluk_Iteration_02d_Results_071211x – Transmittal Ltr Kulluk Modeling_20110713
A-10	Undated	Kulluk Air Quality Impact Modeling Files (Identifying files on file at Region 10)

B. Guidance, Background Information, and Technical Analysis

EPA Exhibit Number	Date	Document Description
B-1	6/1/1977	Atmospheric Emissions from Offshore Oil and Gas Development and Production, Prepared by Richard H. Stephens, Charles Braxton, Maynard M. Stephens, Energy Resources Company, Inc., Prepared for EPA
B-2	2/20/1985	7056 Federal Register / Vol. 50, No. 34
B-3	4/30/1987	United States Environmental Protection Agency Office of Air Quality Planning and Standards Research Triangle Park, Memorandum, RE: Ambient Air
B-4	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
B-5	2/24/1992	Memorandum from John B. Rasnic, EPA, to David Kee, Air and Radiation Division, Subject: Use of Long Term Rolling Averages to Limit Potential to Emit
B-6	3/13/1992	Memorandum from John B. Rasnic, EPA, David Kee, Air and Radiation Division, Subject: Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project
B-7	7/14/1992	Memorandum from John B. Rasnic, EPA, to David Kee, Air and Radiation Division, Subject: 3M Tape Manufacturing Division Minnesota
B-8	3/1/1994	Operating Requirements for and Historical Operations of Arctic Offshore Drilling Systems in the Unites States, Hydrotechnical Construction. Vol. 28. No.3. 1994
B-9	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)
B-10	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
B-11	3/1/1997	Prudhoe Bay Air Quality Monitoring Program Quality Assurance Plan, Prepared by ENSR
B-12	3/19/1997	Letter from Vincent Scheetz, ENSR, to Richard Heffern, ADEC, RE: Quality Assurance Manual – Prudhoe Bay Monitoring Program
B-13	9/24/1997	Memorandum from Richard Heffern, ADEC, to Jim Baumgartner, ADEC, RE: BP Prudhoe Bay Ambient Air QA Monitoring Plan Review
B-14	11/17/1998	Memorandum, Subject: Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements Memorandum
B-15	11/1/1999	Technical Paper, The Plume Volume Molar Ratio Method for Determining NO ₂ /NO _x Ratios in Modeling—Part I: Methodology, Prepared by, Patrick L. Hanrahan Air Quality Division, Oregon Department of Environmental Quality, Portland, Oregon

EPA Exhibit Number	Date	Document Description
B-16	11/1/1999	Technical Paper, The Plume Volume Molar Ratio Method for Determining NO ₂ /NO _x Ratios in Modeling—Part II: Evaluation Studies, Prepared by, Patrick L. Hanrahan Air Quality Division, Oregon Department of Environmental Quality, Portland, Oregon
B-17	10/1/2001	In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC, Order Responding to Petitioner's Request that the Administrator Object to Issuance of a State Operating Permit, Petition No.: II-2001-05
B-18	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
B-19	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
B-20	9/1/2004	Sensitivity Analysis of PVMRM and OLM in AERMOD, Alaska Contract No. 18-8018-04, Prepared by MACTEC
B-21	9/30/2004	Final Report, Sensitivity Analysis of PVMRM and OLM in AERMOD, Alaska DEC Contract No. 18-8018-04, Prepared for Alan Schuler, Alaska Department of Environmental Conservation, Submitted by MACTEC Federal Programs, Inc.
B-22	6/1/2005	Evaluation of Bias in AERMOD-PVMRM, Alaska DEC Contract No. 18-9010-12, Prepared by MACTEC
B-23	6/30/2005	Final Report, Evaluation of Bias in AERMOD-PVMRM, Alaska DEC Contract No. 18-9010-12, Prepared for Alan Schuler, Alaska Department of Environmental Conservation, Submitted by MACTEC Federal Programs, Inc.
B-24	4/11/2006	In the Matter of Pope and Talbot, Inc., Lumber Mill 1 Spearfish, Order Responding to Petitioner's Request that the Administrator Object to Issuance of a State Operating Permit, Petition Number: VIII-2006-04
B-25	4/26/2007	Letter from Alan Schuler, Alaska Department of Environmental Conservation, to Alison Cooke, BP Exploration (Alaska) Inc., Subject: Modeling Protocol for BPXA Liberty Project
B-26	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)
B-27	12/1/2007	Year 2005 Gulfwide Emission Inventory Study, OCS Study MMS 2007-067
B-28	3/1/2008	Quality Assurance Handbook for Air Pollution Measurement Systems; Volume IV: Meteorological Measurements, Version 2.0, Prepared by EPA
B-29	8/1/2009	Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry

EPA Exhibit Number	Date	Document Description
B-30	3/3/2009	Alaska Department of Environmental Conservation Air Permits Program, Technical Analysis Report For Air Quality Control Minor Permit No. AQO181MSSO4, BP Exploration (Alaska) Inc. (BPXA) Endicott Production Facility
B-31	10/13/2009	Alaska Department of Environmental Conservation, Technical Analysis Report, Air Quality Control Minor Permit AQ0166CPT04 and Air Quality Control Construction Permit AQ0270CPT04, Prepared by Zeena Siddeek
B-32	1/27/2010	Letter from John F. Kuterbach, Air Permits Program, to James A Pfeiffer, Air Specialist BP Exploration (Alaska) Inc., Subject: Construction Permit AQ0170CPTOI revised Technical Analysis Report (TAR) and Response to Comments (RTC) for BP Exploration (Alaska) Inc. (BPXA) for the Seawater Injection Plant East (SIPE) Main Injection Pump Bundle Replacement Project
B-33	3/31/2010	U.S. EPA, Region 10, Response to Comments for OCS Prevention of Significant Deterioration, Permit No. R10OCS/PSD-AK-09-01
B-34	4/12/2010	Federal Register, Final Rule - Safety Zone; FRONTIER DISCOVERER, Outer Continental Shelf Drillship, Chukchi and Beaufort Seam Alaska, 75 FR 18404-18407
B-35	6/29/2010	Memorandum, Subject: Guidance Concerning the Implementation of the I-hour N02 NAAQS for the Prevention of Significant Deterioration Program
B-36	9/10/2010	Memorandum, Subject: Issuance of the Clean Air Act Stationary Source Compliance Monitoring Strategy
B-37	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
B-38	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
B-39	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
B-40	3/1/2011	Bureau of Ocean Energy Management, Alaska OCS Region - Detailed Active Leases
B-41	3/1/2011	PSD and Title V Permitting Guidance for Greenhouse Gases, Prepared by EPA
B-42	3/11/2011	Letter from Zeena Siddeek, ADEC, to Robert Brown, Usibelli Coal Mine, Inc., RE: Preliminary Decision to Approve Minor Permit Application for Usibelli Coal Mine, Inc. Wishbone Hill Mining and Processing Operations, Air Quality Control Minor Permit AQ1227MSS02

EPA Exhibit Number	Date	Document Description
B-43	3/21/2011	Letter from Alan Schuler, ADEC, to Myron E. Fedak, U.S. Environment, Regulatory & Land, RE: Approval of Revised Ambient Air Quality Monitoring Site for the Alaska Pipeline Project Gas Treatment Plant
B-44	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
B-45	4/14/2011	Cumulative Impact Discussion, Email from Doug Hardesty, EPA, to Alan Schuler, ADEC, RE: NO2 Modeling Question
B-46	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
B-47	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
B-48	5/3/2011	Associated Fleet Testing Reports – Chukchi Sea and Beaufort Sea Exploration Drilling Programs, Prepared by Emission Technologies, Inc.
B-49	5/3/2011	2010 Discoverer Air Emissions Testing – Chukchi Sea and Beaufort Sea Exploration Drilling Programs, Prepared by Emission Technologies, Inc.
B-50	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
B-51	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
B-52	7/6/2011	OFFSHORE DRILLING: Interior starts clock on Shell Arctic proposal (07/06/2011), Phil Taylor, E&E reporter
B-53	7/12/2011	The White House Office of the Press Secretary, Executive Order, Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska
B-54	7/20/2011	Memorandum, from Dan Meyer, Office of Air, Waste and Toxics, to Permit File, Subject: Derivation of Emission Factors in Tables D.2.1 and D.2.2 of Draft Permit to Shell for Operation of Conical Drilling Unit Kulluk in Beaufort Sea
B-55	7/20/2011	Memorandum, from Dan Meyer, Office of Air, Waste and Toxics, to Permit File, Subject: Calculation of No. 2 Diesel Fuel Usage Restriction for Condition D.4.6 in Draft Permit to Shell for Operation of Conical Drilling Unit Kulluk in Beaufort Sea
B-56	8/30/2011	Beaufort Sea - Outer Continental Shelf Lease Ownership Map

EPA Exhibit Number	Date	Document Description
B-57	8/31/2011	NOAA Website: Nitrogen Dioxide 2004-2009 Description and Notable Features
B-58	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
B-59	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
B-60	9/14/2011	ADEC Modeling Review Procedures Manual
B-61	10/21/2011	Memorandum, Subject: Procedure Used to Determine Background Ambient Air Monitoring Data Values (Attachments: 2011-10-21_PSD raw data and tables)
B-62	10/21/2011	PSD Raw Data and Tables
B-63	10/21/2011	“Memorandum, Subject: Revisions to Emission Factors in Tables D.2.1 and D.2.2 of Draft Permit to Shell for Operation of Conical Drilling Unit Kulluk in Beaufort Sea”
B-64	Undated	Lease Map - Beaufort Sea, Post-1995 OCS OPD Grid, Prepared by Shell
B-65	Undated	Kaktovik Aerial Site Photo
B-66	Undated	BPXA Prudhoe Bay monitoring map
B-67	Undated	Appendix A – Terms, Definitions, Abbreviations
B-68	Undated	Appendix B – Program References and Citations
B-69	Undated	Appendix C – Supporting Documents
B-70	Undated	Appendix D – Standard Operating Procedures, Prepared by SLR
B-71	Undated	EPA’s Endangerment Finding - Frequently Asked Questions
B-72	Undated	Plot of Predicted Normalized 1-hr NO2 Concentrations
B-73	Undated	Disco Appendix L - Beaufort Ice Statistics

BB. Other Guidance, Background Information, and Technical Analysis

EPA Exhibit Number	Date	Document Description
BB-1	12/19/1980	Letter from Douglas Costle, EPA, to Jennings Randolph, Committee on Environment and Public Works, RE: Ambient Air Definition
BB-2	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.
BB-3	10/1/1990	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
BB-4	12/5/1991	Outer Continental Shelf Air Regulations, Proposed Rule, 56 Fed. Reg. 63774
BB-5	7/22/1992	Memorandum to Docket A-90-33; Docketing of detailed Responses to Comments on the Part of 70 Operating Permit Regulations
BB-6	9/4/1992	Outer Continental Shelf Air Regulations, Final Rule, 57 Fed. Reg. 40792
BB-7	8/14/1997	Conditional Test Method (CTM-027) Procedures for Collection and Analysis of Ammonia in Stationary Sources
BB-8	1/1/1999	Black's Law Dictionary, Seventh Edition (Various Terms: constitutum debiti-construction, erase-error)
BB-9	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
BB-10	6/1/2003	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.
BB-11	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.
BB-12	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)
BB-13	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
BB-14	5/24/2007	Letter from Walter Gray, MACTEC, to Alan Schuler, EPA, RE: QAPP Review Support for BP Exploration Alaska (BPXA) Ambient Air Monitoring Program – Liberty Project (Attachment: QAPP review)
BB-15	6/1/2007	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Quarterly Data Report – January through March 2007, Prepared by RETEC
BB-16	6/23/2007	Particulate Sampler Field Envelope, Prepared by IML Air Science
BB-17	7/13/2007	RETEC Horizontal Wind Direction Calibration/Audit Form
BB-18	7/25/2007	Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist, Prepared by ADEC

EPA Exhibit Number	Date	Document Description
BB-19	10/9/2007	Letter from Steven Riva, EPA, to Leon Sedefian, DEC, RE: Ambient Air for the Offshore LNG Broadwater Project
BB-20	11/1/2007	Quality Assurance Project Plan for the Liberty Project Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BB-21	11/1/2007	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Quarterly Data Report – April through June 2007
BB-22	11/1/2007	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Quarterly Data Report – July through September 2007
BB-23	11/5/2007	Letter from Al Trbovich, Hoefler, to Alan Schuler, EPA, RE: BP Exploration (Alaska) Inc. Liberty Development Project Ambient Air Monitoring Program Quality Assurance Project Plan
BB-24	2/1/2008	First Annual Data Report – Liberty Development Project Ambient Air Monitoring Program – Prudhoe Bay, Alaska, Prepared by Hoefler
BB-25	2/1/2008	Prudhoe Bay Unit Ambient Air Quality Monitoring Network Final Data Report – January through December 2007
BB-26	2/13/2008	Department Review of BPXA’s 2006 A-Pad/CCP Ambient Pollutant/Meteorological Data, Prepared by Heidi Strader, ADEC
BB-27	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
BB-28	1/5/2009	Meteorological and Pollutant Data Review - BPXA 2007 Prudhoe Bay Unit Data, Prepared by Enviroplan Consulting
BB-29	1/5/2009	Email from Alan Schuler, ADEC, to Alison Cooke, BPXA, RE: Findings re 2007 Prudhoe Bay Met/Pollutant Data
BB-30	2/26/2009	Email from Linsey DeBell, AECOM, to Herman Wong, EPA RE: Shell Beaufort Monitoring Quality Assurance Project Plans
BB-31	4/15/2009	Other Test Method - 27 - Determination of PM10 and PM 2.5 Emission from Stationary Sources
BB-32	4/15/2009	Other Test Method 28 - Dry Impinger Method for Determining Condensate Particulate Emissions from Stationary Sources
BB-33	7/1/2009	Nuiqsut July 2009 PM2.5 Hourly Values
BB-34	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”
BB-35	7/31/2009	Memo from Chris Hall, EPA, to Herman Wong, EPA, RE: Wainwright Monitoring Data
BB-36	11/1/2009	2008 Annual Data Report – Prudhoe Bay Unit, Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BB-37	11/29/2009	Evaluation of Deadhorse Data, Oct09 - Nov09
BB-38	1/7/2010	Memorandum from Chris Hall, EPA to Herman Wong, EPA and Mary Portanova, EPA RE: Deadhorse Air Monitoring Data Review – October 23 through December 25, 2009

EPA Exhibit Number	Date	Document Description
BB-39	1/7/2010	Memorandum from Chris Hall, EPA to Herman Wong, EPA, RE: Wainwright Air Monitoring Data Review – July 1 through October 31, 2009
BB-40	2/1/2010	Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BB-41	2/9/2010	Federal Register [75 FR 6474-6537], Primary National Ambient Air Quality Standards for Nitrogen Dioxide, Final Rule
BB-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
BB-43	3/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – October 1 through December 31, 2009, Prepared by AECOM
BB-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
BB-45	3/1/2010	Wainwright Near-Term Ambient Air Quality Monitoring Program Annual Data Report – November 2008 through November 2009, Prepared by AECOM
BB-46	3/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program Fourth Quarter Data Report – September through December 2009, Prepared by AECOM
BB-47	3/10/2010	Memorandum from Paul Boys, EPA, to Pat Nair, EPA, RE: Review of the Shell Frontier Discoverer Drillship Stack Test Plan
BB-48	3/23/2010	Memorandum from Stephen D. Page, EPA, RE: Modeling Procedures for Demonstrating Compliance with PM2.5 NAAQS
BB-49	3/31/2010	Memorandum from Christopher Hall, EPA, to Herman Wong, EPA, RE: Wainwright Air Monitoring Data Review – Nov. 1 through Dec. 7, 2009
BB-50	3/31/2010	Memorandum from Christopher Hall, EPA, to Herman Wong, EPA, RE: Wainwright Particulate Matter Data Review – July 1 through December 7, 2009
BB-51	4/1/2010	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-52	4/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – January 1 through March 31, 2010, Prepared by AECOM
BB-53	4/7/2010	Memo from Chris Hall, EPA, to Mary Portanova, EPA, RE: Badami Air Monitoring Data Review – Aug 15 through Dec 15, 2009
BB-54	4/7/2010	Letter from Al Trbovich, Hoefler, to Alan Schuler, EPA, RE: BP Exploration (Alaska) – Revised Prudhoe Bay Unit 2008 Annual Data Report for the Ambient Air and Meteorological Monitoring Program

EPA Exhibit Number	Date	Document Description
BB-55	4/8/2010	Memo from Christopher Hall, EPA, to Mary Portanova, EPA, RE: Badami PM2.5 Data Review Final
BB-56	5/1/2010	Cover Page – Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM
BB-57	5/1/2010	Signature Page - Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM
BB-58	5/1/2010	Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM, Revision 1
BB-59	5/1/2010	Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.1, Prepared by Hoefler
BB-60	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
BB-61	6/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program First Quarter Data Report – January through March 2010, Prepared by AECOM
BB-62	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 NO ₂ National Ambient Air Quality Standard
BB-63	8/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – April 1 through June 30, 2010, Prepared by AECOM
BB-64	8/17/2010	Wainwright Ambient Air Quality and Meteorological Monitoring Station Quality Assurance Project Plan, Prepared by AECOM
BB-65	8/23/2010	Memorandum from Stephen Page, EPA, to Regional Air Division Directors, EPA, RE: Guidance Concerning the Implementation of the 1-hour SO ₂ NAAQS for the Prevention of Significant Deterioration Program
BB-66	9/1/2010	2009 Annual Data Report – Prudhoe Bay Unit, Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BB-67	9/1/2010	July 2010 Monthly Data Deliverable – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BB-68	9/1/2010	August 2010 Monthly Data Deliverable – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by Hoefler
BB-69	10/1/2010	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – July 1 through September 30, 2010, Prepared by AECOM
BB-70	11/1/2010	Deadhorse PM _{2.5} Monitoring Program Data Report 4 th Quarter 2009, Prepared by AECOM

EPA Exhibit Number	Date	Document Description
BB-71	11/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program Second Quarter Data Report – April through June 2010, Prepared by AECOM
BB-72	11/1/2010	Wainwright Permanent Ambient Air Quality Monitoring Program Third Quarter Data Report – July through September 2010, Prepared by AECOM
BB-73	11/1/2010	Quarter A Data Summary – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by SLR
BB-74	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
BB-75	12/1/2010	Deadhorse PM _{2.5} Monitoring Program Data Report 2 nd Quarter 2010, Prepared by AECOM
BB-76	12/21/2010	Email from Alan Schuler, ADEC, to Alison Cooke, BPXA, RE: Revised Findings Report for 2008 and 2009 Prudhoe Data
BB-77	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
BB-78	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
BB-79	1/1/2011	Deadhorse PM _{2.5} Monitoring Program Data Report 1 st Quarter 2010, Prepared by AECOM
BB-80	1/1/2011	Quarter B Data Summary (September – November 2010) – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Prepared by SLR
BB-81	2/1/2011	Deadhorse PM _{2.5} Monitoring Program Data Report 3 rd Quarter 2010, Prepared by AECOM
BB-82	2/22/2011	Letter from Al Trbovich, SLR, to Alan Schuler, EPA, RE: BP Exploration (Alaska) – Prudhoe Bay Unit, Ambient Air and Meteorological Monitoring Program Quality Assurance Project Plan (Attachment: Quality Assurance Project Plan)
BB-83	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 NO ₂ National Ambient Air Quality Standard
BB-84	3/1/2011	Badami Ambient Air Quality and Meteorological Monitoring Station Data Summary Report – October 1 through December 30, 2010, Prepared by AECOM
BB-85	3/1/2011	Deadhorse PM _{2.5} Monitoring Program Data Report 4 th Quarter 2010, Prepared by AECOM

EPA Exhibit Number	Date	Document Description
BB-86	3/1/2011	Wainwright Permanent Ambient Air Quality Monitoring Program Fourth Quarter Data Report – October through December 2010, Prepared by AECOM
BB-87	3/1/2011	Quality Assurance Project Plan – Point Lay Comprehensive Ambient Air and Meteorological Monitoring Program, Revision 1.4, Prepared by SLR
BB-88	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
BB-89	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
BB-90	4/1/2011	Wainwright Permanent Ambient Air Quality Monitoring Program Annual Data Report – January through December 2010, Prepared by AECOM
BB-91	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
BB-92	4/19/2011	Email from Kwame Agyei, ADEC, to Al Trbovich, SLR, RE: Approval of PBU QAPP Version 1.1
BB-93	4/19/2011	Prudhoe Bay Unit QAPP Version 1.1 Approval Signatures
BB-94	4/29/2011	Technical Memorandum from Tim Martin, Air Sciences, to Pauline Ruddy, Shell, RE: Alternate Approaches to Evaluating 1-Hour NO ₂ Impacts for the Shell Discoverer Drillship - NO ₂ Pairing and NO ₂ /NO _x Ratios, Prepared by Tim Martin, Air Sciences
BB-95	5/1/2011	Kaktovik Ambient Air and Meteorological Monitoring Program – Quality Assurance Project Plan, Prepared by SLR
BB-96	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
BB-97	6/1/2011	Arctic Permits Newsletter, Prepared by EPA
BB-98	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
BB-99	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
BB-100	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
BB-101	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

EPA Exhibit Number	Date	Document Description
BB-102	6/23/2011	Memorandum from Chris Hall, EPA, to Air Quality Permit Modeling Team, RE: Point Lay Air Monitoring Data Review – 6/01/10 through 2/28/11
BB-103	6/24/2011	ADEC QAPP & Data Review Project List without Cost Info, Prepared by AES
BB-104	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), Validated met data 8-15-09 through 9-30-10(12-3-10))
BB-105	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, Nov 2009 through Aug 2010 Deadhorse FEM-FRM)
BB-106	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, Transmittal Letter)
BB-107	Undated	Prudhoe Bay CCP & A Pad sites-AQ Data (Attachments: 2007, 2008, 2009)
BB-108	Undated	Pt Lay site-AQ Data (Attachments: 1007PTL, 1008PTL, PTL 100601 100831, PTL 100901 101130, PTL 101201 110228)
BB-109	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, WPS 2010)
BB-110	Undated	Merriam-Webster's Collegiate Dictionary, Tenth Edition (Various Terms: bughouse-bulletin, constative-consult, equivalent-erica)
BB-111	Undated	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.gov/tnn/emc.ctm.html
BB-112	Undated	Summary Table: Deadhorse MQO Development - Final
BB-113	Undated	Nuiqsut Q3 Alaska Photo

C. Correspondence and Communication

EPA Exhibit Number	Date	Document Description
C-1	8/21/2009	Email from Brad Thomas, ConocoPhillips, to Christopher Hall, EPA, RE: Collocated PM2.5 Monitors
C-2	8/26/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Shell Badami Monitoring - Installation Audit
C-3	9/8/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Photo of Deadhorse
C-4	9/9/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Photo of Deadhorse
C-5	9/22/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: todays call
C-6	10/6/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: OAQPS memo for discussion on today's call
C-7	10/26/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: PEP data
C-8	10/26/2009	Email from Brad Thomas, ConocoPhillips, to Herman Wong, EPA, RE: Deadhorse Update
C-9	10/27/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: relevant text from the draft QAPP (Attachment: QAPP_excerpt)
C-10	11/9/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Tomorrow's call
C-11	11/13/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: Badami Monitoring Station Quarterly Report
C-12	11/13/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report
C-13	11/13/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: Nuiqsut PM2.5 data
C-14	11/13/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: State pm2.5 data
C-15	11/18/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: Deadhorse statistical approach
C-16	11/24/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Today's call
C-17	11/26/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: [TRANSFER REMINDER] Badami Monitoring Station Quarterly Report
C-18	11/26/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: [TRANSFER REMINDER] Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report
C-19	12/7/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Precision & Bias goals (Attachment: AECOM stdev bias equations)
C-20	12/18/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: EPA Approval for the Deadhorse QAPP
C-21	12/29/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: EPA PEP & NPAP contractor
C-22	1/14/2010	Email from Erik Hodek, AECOM, to Herman Wong, EPA, RE: FW: Updated Data Spreadsheet for Submittal to EPA /Shell
C-23	1/6/2010	Email from Erik Hodek, AECOM, to Christopher Hall, EPA, RE: Badami Monitoring Report

EPA Exhibit Number	Date	Document Description
C-24	1/7/2010	Email from Christopher Hall, EPA, to Eric Hodek, AECOM, RE: Badami hourly data
C-25	1/14/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami raw data
C-26	1/21/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami PM2 data question
C-27	2/2/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami data set
C-28	2/5/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: R10 comments on the Badami QAPP Revision 2
C-29	3/1/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Sampling Frequency
C-30	3/1/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Shell Reindeer Island Meteorological Monitoring QAPP
C-31	3/12/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term September, November and December 2009 Monthly Preliminary Data Summary (Attachments: Final_Wainwright_Permanent_Monitoring_Station_Data_Summary_Report_November_2009, WPS_1109, WPS_0909, and WPS_1009)
C-32	3/13/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright data
C-33	3/26/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Report and Data Distribution and PM 2.5
C-34	3/29/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Final Reindeer Island QAPP
C-35	3/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Quarterly Report Transmittal
C-36	3/30/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q 4 2009 Monitoring Report
C-37	4/1/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Coordinates for the Nuiqsut Station
C-38	5/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Alaska PSD PEP/NPAP audits
C-39	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
C-40	5/25/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Monitoring QAPP
C-41	5/25/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Monitoring Station QAPP
C-42	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)
C-43	6/9/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Talking points for tomorrow's meeting
C-44	6/10/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Reindeer Island Data
C-45	6/11/2010	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: Reindeer Island Q2 2009 Report
C-46	6/15/2010	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: AQ and Met Data

EPA Exhibit Number	Date	Document Description
C-47	6/15/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Reindeer Island Reports
C-48	6/15/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q 1 2010 Monitoring Report
C-49	6/16/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: NO2./Nox In-stack Ratios (Attachment: Master-NO2+NoxRatios)
C-50	6/17/2010	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: Master-NO2+NoxRatios (Attachment: Master-NO2+NoxRatios)
C-51	6/18/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non -federal travel funds
C-52	6/28/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: July Meeting
C-53	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)
C-54	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)
C-55	6/28/2010	Email from Steve Mackey, Hoefler Consulting Group, to Christopher Hall, EPA, RE: Out of Office AutoReply: Ethics requirements for EPA employees using non-federal travel funds
C-56	6/30/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Start Time for 15 July 2010
C-57	6/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non-federal travel funds
C-58	7/7/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: potential PEP auditor contact
C-59	7/8/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: potential PEP auditor contact
C-60	7/12/2010	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: NO2/Nox in-stack ratios
C-61	7/15/2010	Email from Robert Elleman, EPA, to David Johnson, AMSTech, RE: comments to audit report (Attachment: Review of Draft audit report v2)
C-62	7/15/2010	Email from Robert Elleman, EPA, to Ken Richmond, ENVIRON, RE: radiometrics article
C-63	7/16/2010	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: Reindeer Island Meteorological Monitoring Program 2009 Annual Report
C-64	7/16/2010	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: Reindeer Island Meteorological Monitoring Program 2009 Annual Report
C-65	7/19/2010	Email from Robert Elleman, EPA, to Bob Baxter, Technical & Business Systems, RE: Endeavor Is. Audit Report (Profiler)
C-66	7/20/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Action Items from Meeting of 15 July 2010
C-67	7/29/2010	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: [Transfer Reminder] Reindeer Island Meteorological Monitoring Program 2009 Annual Report

EPA Exhibit Number	Date	Document Description
C-68	7/29/2010	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: [TRANSFER REMINDER] Reindeer Island Meteorological Monitoring Program 2009 Annual Report
C-69	8/4/2010	Email from Herman Wong, EPA, to David Johnson, AMSTech, RE: Quality Assurance Audit Report of 27 July 2010
C-70	8/5/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: GHE 1-hour NO2 and SO2
C-71	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
C-72	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
C-73	8/9/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: August 12 Shell & R10 Meeting
C-74	8/9/2010	Email from J.B. Dennison, SLR Consulting, to Herman Wong, EPA, RE: COMMENTS ON: EPA Telecon Agenda Items
C-75	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.
C-76	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)
C-77	8/10/2010	Email from Robert Elleman, EPA, to Ken Richmond, ENVIRON, RE: Endicott Sounder Temperature Profiles - May, June, July, August
C-78	8/10/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Shell Near-Term Modeling Concepts Memo
C-79	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
C-80	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)
C-81	8/12/2010	Email from Eric Hansen, ENVIRON, to Natasha Greaves, EPA, RE: Shell OCS Source Test Update (Attachment: Test schedule update let 081010)
C-82	8/12/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Draft Radiometer Guidance V 10 (Attachment: Draft radiometer guidance v10.)
C-83	8/12/2010	Email from Steve Mackey, SLR Consulting, to Christopher Hall, EPA, RE: Update on NPAP & PEP Audits
C-84	8/13/2010	Email from J.B. Dennison, SLR Consulting, to Christopher Hall, EPA, RE: Nice talking with you
C-85	8/16/2010	Meeting Notes: August 13, 2010 Meeting Between Shell and EPA, Prepared by Janis Hastings, EPA
C-86	8/17/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Afterthoughts from 12 August 2010 Meeting (Attachment: ThoughtsFrom20100812Mtg)
C-87	8/17/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: charts from meeting

EPA Exhibit Number	Date	Document Description
C-88	8/17/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Station QAPP
C-89	8/23/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Preliminary Sonde Launches (Attachment: Preliminary launch results v2 081810)
C-90	8/31/2010	Email from Herman Wong, EPA, to Bob Baxter, Technical & Business Systems, RE: Supplemental calibrations , next audit date, and updated profiler specs
C-91	9/1/2010	Email from Richard Payton, EPA, to Amy Algoe-Eakin, EPA, RE: Unresolved Exceptional Events Q & A and draft EE Definitions Document (Attachment: EER Internal Q&A Document w defns_need resolution_090110)
C-92	9/2/2010	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: Scheduled Conference Call
C-93	9/7/2010	Email from Tim Martin, Air Sciences, to Herman Wong, EPA, RE: Shell Near-Term Modeling Concepts Memo
C-94	9/14/2010	Email from Robert Elleman, EPA, to J.B. Dennison, SLR Consulting, RE: Endicott Temperature Profiler Monthly Data Deliverables (July & Aug)
C-95	9/14/2010	Email from Herman Wong, EPA, to Bob Baxter, Technical & Business Systems , RE: Endicott Temperature Profiler Monthly Data Deliverables (July & Aug)
C-96	9/14/2010	Email from Christopher Hall, EPA, to Steve Mackey, SLR Consulting, RE: PM2.5 Collocation Question
C-97	9/15/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Thursday, 23 September 2010 Meeting
C-98	9/16/2010	Email from Christopher Hall, EPA, to Steve Mackey, SLR Consulting, RE: Proposed Teleconference on PM 2.5 Collocation Frequency
C-99	9/17/2010	Email from Janis Hastings, EPA, to Mark Schindler, Octane, RE: Shell Kulluk (2012) pre-application meeting
C-100	9/20/2010	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Invoice and Shell Meeting
C-101	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)
C-102	9/21/2010	Email from Steve Mackey, Hoefler, to Doug Hardesty, EPA, RE: Invitation - Collocated Conference call with SLR/AECOM
C-103	9/29/2010	Email from Brad Thomas, ConocoPhillips, to Herman Wong, EPA, RE: Summary of all Wainwright data available to R10
C-104	10/3/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Summary of all Wainwright data available to R10
C-105	10/3/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Summary of all Wainwright data available to R10
C-106	10/13/2010	Meeting Sign In Sheet, EPA Region 10, Seattle WA
C-107	10/13/2010	EPA Meeting Notes RE Shell Pre Ap Meeting - Wong
C-108	10/13/2010	EPA Meeting Notes RE Shell Pre Ap Meeting Sign In
C-109	10/13/2010	EPA Meeting Notes RE Shell Pre Ap Meeting

EPA Exhibit Number	Date	Document Description
C-110	10/14/2010	Email from Tanya Sanerib, Crag, to Juliane Matthews, EPA, RE: Update to Shell's Beaufort Exploration Plan
C-111	10/20/2010	Email from Natasha Greaves, EPA, to Greg Homer, Shell, RE: Shell Offshore Inc., Alaska Beaufort Sea Exploration Program
C-112	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))
C-113	10/20/2010	Meeting Notes, Topic: Major Permit vs Minor Permit Application Options
C-114	10/22/2010	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Meeting Notes
C-115	10/22/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Use of AERMOD+COARE
C-116	10/22/2010	Email from Natasha Greaves, EPA, to Eric Hansen, ENVIRON, RE: Contact Information for Call on 10/28
C-117	10/25/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Endeavor Island Meteorological Monitoring Program
C-118	10/26/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Equiv Demo Memo
C-119	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
C-120	10/26/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Use of AERMOD+COARE
C-121	10/26/2010	Call Log, Topic: Major Permit vs Minor Permit Application Options
C-122	10/28/2010	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Elleman and Wong edits to meeting notes of 21 October 2010 (Attachment: R10Edits@MeetingNotes21October2010)
C-123	11/4/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Proposed Agenda for 09 November 2010 Meeting
C-124	11/5/2010	Call Log, Topic: Major Permit vs Minor Permit Application Options
C-125	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)
C-126	11/9/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Nov 10 COARE-AERMOD presentation
C-127	11/10/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: AERMOD-COARE Evaluations (corrected version)
C-128	11/10/2010	Email from Eric Hansen, ENVIRON, to Rodger Steen, Air Sciences, RE: Meeting
C-129	11/11/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Corrected Draft Agenda for R 10/AQMG/Shell GoToMeeting (Attachment: ShellMeetingAgenda-22 November2010)
C-130	11/14/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse PM2.5 Station Q4 2009 Monitoring Report
C-131	11/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q4 2009 Data Summary

EPA Exhibit Number	Date	Document Description
C-132	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)
C-133	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)
C-134	11/16/2010	Meeting Sign In Sheet, EPA Region 10, Seattle WA
C-135	11/16/2010	Meeting Notes, EPA Region 10, Seattle WA, RE: Shell BACT Analysis
C-136	11/19/2010	Email from Herman Wong, EPA, to Steve Mackey, SLR Consulting, RE: PT Thomson Met Data
C-137	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
C-138	11/24/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Pairing in time
C-139	11/26/2010	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: [Possible VIRUS!] AERMOD VOLUME Source Error
C-140	11/29/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Station Q 3 2010 Monitoring Report
C-141	12/10/2010	Email from Rodger Steen, Air Sciences, to Dave Bray, EPA, RE: Shell Kulluk Exploratory Drilling in Beaufort - NOI (Attachment: Shell BS NOI 20101210)
C-142	12/10/2010	Email from Natasha Greaves, EPA, to Rodger Steen, Air Sciences, RE: Shell Kulluk Exploratory Drilling in Beaufort - NOI Receipt
C-143	12/14/2010	Call Log, Topic: Minor Permit Application Submittal
C-144	12/15/2010	Email from Robert Elleman, EPA, to Kirk Winges, ENVIRON, RE: COARE AERMOD report
C-145	12/17/2010	Email from Dave Bray, Office of Air, Toxics and Waste, to Eric Hansen, ENVIRON, RE: Meeting next week
C-146	12/20/2010	Email from Dave Bray, Office of Air, Toxics and Waste, to Eric Hansen, ENVIRON, RE: May I call you at 3 pm tomorrow?
C-147	12/21/2010	Email from Duane Siler, Crowell & Moring, to Julie Vergeront, EPA, RE: Shell Position Paper (Attachment: Separate Source Position Paper)
C-148	12/21/2010	Email from Duane Siler, Crowell & Moring, to Julie Vergeront, EPA, Regarding Shell Position Paper (Attachment: Separate Source Position Paper)
C-149	12/22/2010	Email from Robert Elleman, EPA, to Kirk Winges, ENVIRON, RE: GoToMeeting Details: AERMOD COARE Dec 28 th 10:30AM Pacific
C-150	12/23/2010	Email from Thomas Damiana, AECOM, to Brad Thomas, ConocoPhillips, RE: Wainwright Approved QAPP
C-151	12/23/2010	Email from Mark Shindler, Octane, to Natasha Greaves, EPA, RE: Merry Christmas and Forward Plan
C-152	12/23/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Finalized Wainwright Monitoring Program QAPP
C-153	1/5/2011	Email from Juliane Matthews, EPA, to Lance Tolson, Shell, RE: Shell/EPA Meeting
C-154	1/7/2011	Email from Roger Brode, EPA, to Ken Richmond, ENVIRON, Re: aernet bug

EPA Exhibit Number	Date	Document Description
C-155	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>)
C-156	1/10/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: [TRANSFER REMINDER] Badami Annual Data Summary
C-157	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)
C-158	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)
C-159	1/11/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: AERMOD Meeting
C-160	1/11/2011	Email from Roger Brode, EPA, to Bart Brashers, ENVIRON, RE: Beta AERMET/AERMOD
C-161	1/12/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Meetings during AMS, 24-28 January 2011
C-162	1/13/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse PM2.5 Data
C-163	1/16/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q 1 2010 Monitoring Report
C-164	1/16/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q1 2010 Monitoring Report
C-165	1/18/2011	Email from Herman Wong, EPA, to J.B. Dennison, SLR Consulting, RE: Meeting Next Week
C-166	1/18/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Agenda for today's meeting (Attachment: Agenda-20110118)
C-167	1/19/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Notes on conference call (Attachment: Simplified operational concept)
C-168	1/19/2011	Email from Herman Wong, EPA, to Doug Hardesty, EPA, RE: Accepted: Conference Call to Develop Agenda for KZ Meeting
C-169	1/19/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Follow up to yesterday's meeting
C-170	1/19/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Follow up to yesterday's meeting
C-171	1/20/2011	Email from Herman Wong, EPA, to J.B. Dennison, SLR Consulting, RE: Comments of KZ
C-172	1/21/2011	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Impact Modeling Protocol - Kulluk Floating Drilling Platform - Alaska OCS
C-173	1/21/2011	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: Impact Modeling Protocol - Kulluk Floating Drilling Platform - Alaska OCS
C-174	1/24/2011	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: Critical Richardson number paper (Attachment: Pages200to204)
C-175	1/25/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: (No Subject)
C-176	1/25/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RW: Wainwright Q3 and Q2 Data (Attachments: WPS_0910, WPS_0410, WPS_0510, WPS_0610, WPS_0710, and WPS_0810)

EPA Exhibit Number	Date	Document Description
C-177	1/28/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Cancelled, 10 February 2011 Modeling Protocol Meeting
C-178	1/28/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 10 February 2011 Meeting
C-179	1/28/2011	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, RE: YSU PBL (Attachment: Model_Zi.vs.pro_Zir)
C-180	2/1/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Shell Kulluk Emission Inventory
C-181	2/2/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Thursday, 9:30 AM, 10 February 2011 Meeting
C-182	2/8/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Title 5 Forms
C-183	2/8/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Meeting Feb 9 th Schedule (Attachment: Agenda 2-9-11)
C-184	2/8/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Meeting Feb 9 th Schedule (Attachment: Agenda 2-9-11)
C-185	2/8/2011	Email from Ken Richmond, ENVIRON, to Herman Wong, EPA, RE: North Slope Alaska NH3
C-186	2/9/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q 2 2010 Monitoring Report
C-187	2/9/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q2 Data Summary
C-188	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)
C-189	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)
C-190	2/10/2011	Email from Herman Wong, EPA, to Doug Hardesty, EPA, RE: Accepted: Kulluk Minor Source Monitoring Protocol
C-191	2/11/2011	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse 4 th Qtr FEM Data (Attachment: Deadhorse_Hourly_Data_Quarter4_2009)
C-192	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)
C-193	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)
C-194	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)
C-195	2/15/2011	Email from Herman Wong, EPA, to Pauline Ruddy, Shell, RE: AERMOD-COARE Information & Data Request; First (Attachment: RequestInfo&DataReq@V1)
C-196	2/16/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 24 Feb 2011 Meeting
C-197	2/18/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Followup 2-18-2011

EPA Exhibit Number	Date	Document Description
C-198	2/18/2011	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA, RE: Response to Your Memo (Attachment: Response to February 14 Information Request)
C-199	2/18/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Followup 2-18-2011
C-200	2/18/2011	Email from Kirk Winges, ENVIRON, to Herman Wong, EPA, RE: Response to Your Memo (Attachment: Response to February 14 Information Request)
C-201	2/20/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Kulluk Plans
C-202	2/21/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Meeting Next Week
C-203	2/21/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Meeting Next Week
C-204	2/22/2011	Email from Doug Hardesty, EPA, to Rodger Steen, Air Sciences, RE: Kulluk Minor Beaufort Application Submission
C-205	2/22/2011	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse FEM Data
C-206	2/22/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List (Attachment: Action Item List 2-22-11 Draft)
C-207	2/22/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List (Attachment: Action Item List 2-22-11 Draft)
C-208	2/23/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Kulluk Minor Beaufort Application Submission
C-209	2/23/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Plan in Case of Weather
C-210	2/24/2011	Email from Herman Wong, EPA, to Doug Hardesty, EPA, RE: AERMOD-COARE
C-211	2/24/2011	Email from Christopher Hall, EPA, to Brad Broker, SLR Consulting, RE: Deadhorse QAPP & other documentation
C-212	2/27/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: After thoughts of meeting
C-213	2/28/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Kulluk Minor Source Application (Attachments: Kulluk SupplementReport 20110228 Part 2, Kulluk Beaufort Minor App Cover Letter 20110228, and Kulluk OperatingPermitApp 20110228 Part1)
C-214	2/28/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Kulluk Minor Source Submittal
C-215	2/28/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List
C-216	2/28/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List
C-217	2/28/2011	Operating Permit Application and Supplemental Report: - 1_Kulluk Beaufort Minor App Cover Ltr_20110228 - 2_Kulluk_OperatingPermitApp_20110228_Part1 - 3_Kulluk_SupplementReport_20110228_Part2 - FW_Kulluk_Minor_Source_Application - Kulluk_Minor_Source_Application_20110228
C-218	3/1/2011	Email from Ken Richmond, ENVIRON, to Tim Martin, Air Sciences, RE: Electronic Files for Kulluk Beaufort Application

EPA Exhibit Number	Date	Document Description
C-219	3/1/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Revised Page 1 of Kulluk Submittal (Attachment: Pages from Kulluk Beaufort Minor App Revision 20110301)
C-220	3/1/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Updated Report with Replacement Page for Shell Kulluk Application with (Attachment: Kulluk SupplementReport 20110228 Rev20110301 Part2)
C-221	3/10/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: OCS Source Definition Update
C-222	3/1/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q 3 2010 Monitoring Report
C-223	3/1/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Q3 2010 Data Summary
C-224	3/1/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Electronic Files for Kulluk Beaufort Application
C-225	3/1/2011	Supplemental Report Revision – 1_Kulluk Beaufort Minor App Revision – FW_Revised Page1 of Kulluk Submittal – Revised_Page 1 of Kulluk Submittal
C-226	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)
C-227	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)
C-228	3/3/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Meeting Notes From February 10 and 24 (Attachment: EPA-Shell Technical Meeting 2-10-11)
C-229	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)
C-230	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)
C-231	3/3/2011	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: NO2/Nox Spreadsheet from Kulluk Application
C-232	3/4/2011	Email from Anthony Galligan, AECOM, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report & Validated Data
C-233	3/4/2011	Email from LeapFILE to Anthony Galligan, AECOM, RE: Badami Fourth Quarter 2010 Data Report & Validated Data [New Transfer Confirmation]
C-234	3/4/2011	Email from LeapFILE to Anthony Galligan, AECOM, RE: wong.herman@epa.gov Successfully Downloaded Your Files
C-235	3/4/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Mailing Address
C-236	3/4/2011	Email from Anthony Galligan, AECOM, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report
C-237	3/4/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Digital Data

EPA Exhibit Number	Date	Document Description
C-238	3/4/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Mailing Address
C-239	3/7/2011	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami Shelter Temperature Data
C-240	3/7/2011	Email from Christopher Hall, EPA to Anthony Galligan, AECOM, RE: Badami Validated Data for 8/15/09 through 12/31/2010
C-241	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))
C-242	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)
C-243	3/8/2011	Email from Sara Glenn, Shell, to Doug Hardesty, EPA, RE: Invitation - Telecon-Shell & EPA
C-244	3/8/2011	Email from Sara Glenn, Shell, to Gina McCarthy, EPA, RE: Update #2 - Shell Telecon with EPA
C-245	3/8/2011	Email from Sara Glenn, Shell, to Gina McCarthy, EPA, RE: Update #3 - Shell Telecon with EPA
C-246	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
C-247	3/8/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes From 3-4-11_1
C-248	3/8/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes From 3-4-11_2
C-249	3/8/2011	Email from Sara Glenn, Shell, to Gina McCarthy, EPA, RE: Update #2 - Shell Telecon with EPA
C-250	3/8/2011	Email from Sara Glenn, Shell, to Gina McCarthy, EPA, RE: Update #3 - Shell Telecon with EPA
C-251	3/8/2011	Email from Herman Wong, EPA, to Nicole St. Amand, RE: Meeting Notes and Participants during the 06 May 2010 Meeting
C-252	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
C-253	3/8/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: co-aermod disks
C-254	3/8/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes From 3-4-11
C-255	3/8/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes From 3-4-11
C-256	3/8/2011	Email from Sara Glenn, Shell, to Doug Hardesty, EPA, RE: Invitation - Telecon-Shell & EPA
C-257	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)
C-258	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)
C-259	3/9/2011	Email from Doug Hardesty, EPA, to Pete Slaiby, Shell, RE: Shell Telephone Call Record for 1pm Pacific, 3-8-11
C-260	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)

EPA Exhibit Number	Date	Document Description
C-261	3/9/2011	Email from Doug Hardesty, EPA, to Pete Slaiby, Shell, RE: Shell Telephone Call Record for 1pm Pacific, 3-8-11
C-262	3/9/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: COARE Clarification Request , and Second Information and Data Request
C-263	3/10/2011	Email from Herman Wong, EPA, to Kirk Wings, 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)
C-264	3/11/2011	Email from LeapFILE, to Anthony Galligan, AECOM, RE: Reindeer Island Q4 2010 Data Summary Report and Validated Data [New Transfer Confirmation]
C-265	3/11/2011	Email from LeapFILE, to Anthony Galligan, AECOM, RE: wong.herman@epa.gov Successfully Downloaded Your Files
C-266	3/11/2011	Email from LeapFILE, to Anthony Galligan, AECOM, RE: Reindeer Island Q4 2010 Data Summary Report and Validated Data
C-267	3/11/2011	Email from LeapFILE, to Anthony Galligan, AECOM, RE: wong.herman@epa.gov Successfully Downloaded Your Files
C-268	3/13/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Reindeer Island Q4 2010 Data Summary Report and Validated Data
C-269	3/13/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: COARE Clarification Request , and Second Information and Data Request
C-270	3/13/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: COARE Clarification Request , and Second Information and Data Request
C-271	3/13/2011	Email from Herman Wong, EPA, to Bart Brashers, ENVIRON, COARE Clarification Request , and Second Information and Data Request
C-272	3/14/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Would you have time Monday
C-273	3/14/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: COARE Clarification Request, and Second Information and Data Request (Attachment: ResponsesToInformationRequestNo2)
C-274	3/14/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: KZ Profiler
C-275	3/14/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Would you have time Monday?
C-276	3/14/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: COARE Clarification Request, and Second Information and Data Request (Attachment: ResponsesToInformationRequestNo2)
C-277	3/14/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: KZ Profiler
C-278	3/15/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Q4 2010 Reindeer Island Report and Data
C-279	3/15/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: COARE Clarification Request , and Second Information and Data
C-280	3/16/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q4 2010 Monitoring Report
C-281	3/16/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Deadhorse Q4 2010 Quarterly Data Summary
C-282	3/16/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q4 2010 Monitoring Report

EPA Exhibit Number	Date	Document Description
C-283	3/17/2011	Email from Anthony Galligan, Shell, to Doug Hardesty, EPA, RE: [Transfer Reminder] Badami Fourth Quarter 2010 Data Report and Validated Data
C-284	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)
C-285	3/17/2011	Email from Brad Broker, SLR Consulting, to Christopher Hall, EPA, RE: NPAP and PEP audits for PSD monitoring stations (Attachment: - NPAP-PEP_QAPPsection)
C-286	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)
C-287	3/18/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Shell Kulluk Incompleteness Letter (Attachment: Shell Kulluk Completeness Letter 3-18-2011)
C-288	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)
C-289	3/18/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes from 3-18-11
C-290	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)
C-291	3/18/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Phone Call Notes from 3-18-11
C-292	3/21/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: 14 February 2011 Responses
C-293	3/21/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: AERMOD-COARE Decision Document
C-294	3/22/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE Quick Question
C-295	3/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Conversation to Discuss Incompleteness for Kulluk
C-296	3/24/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Agenda
C-297	3/24/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Question?
C-298	3/24/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
C-299	3/25/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Updated Action Item List (Attachment: 11)
C-300	3/25/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Draft Agenda for Workshops (Attachment: Shell-R10 Seattle Workshops Agenda Final)
C-301	3/15/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: COARE Clarification Request, and Second Information and Data Request
C-302	3/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Questions for Shell
C-303	3/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Revised Workshop Agenda (Attachment: Shell-R10 Seattle Workshops Agenda Final)

EPA Exhibit Number	Date	Document Description
C-304	3/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Revised Workshop Agenda
C-305	3/28/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: (No Subject)
C-306	3/28/2011	Email From Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Responses to Alan Schuler Questions 3-28-2011 (Attachment: Responses to Alan Schuler Questions - 20110328)
C-307	3/28/2011	Alan Schuler Questions: – 1_Responses to Alan Schuler Qs – FW_Responses_to_Alان_Schuler_Qs – Email_RE Responses to Alan Schuler Qs
C-308	3/29/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Kulluk Minor Source Response to Additional Information Request (Attachment: Kulluk OCS Applications 20110329)
C-309	3/29/2011	Email from Julie Vergeront, EPA, to Kirk Lilley, Kirk Lilley PLLC, RE: Meetings with Shell on 3/25 and 3/26
C-310	3/29/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Lunch Orders for Thursday
C-311	3/29/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Lunch Orders for Thursday
C-312	3/29/2011	OCS Permit Applications: – 1_KullukOCSApplications_20110329 – Email_RE Kulluk Response to info request – FW_Kulluk Response to add info request
C-313	3/30/2011	Email from Kirk Lilley, Kirk Lilley PLLC, to Julie Vergeront, EPA, RE: [POSSIBLE SPAM] Meeting tomorrow
C-314	3/30/2011	Email from Christopher Hall, EPA, to Brad Broker, SLR Consulting, RE: NPAP and PEP audits for PSD monitoring stations
C-315	3/30/2011	Email from Kirk Lilley, Kirk Lilley PLLC, to Julie Vergeront, EPA, RE: Meeting tomorrow
C-316	3/31/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: The 8 CD's
C-317	3/31/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Did you get the CDs?
C-318	4/1/2011	ENVIRON Disc, COARE-AERMOD Model Evaluation Files, Shell Alaska OCS Beaufort Chukchi Sea Exploratory Drilling Program
C-319	4/1/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Question on Form
C-320	4/4/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Considerations When Modeling 1-hour NO2
C-321	4/5/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: PPT and CALPUFF
C-322	4/5/2011	Email from Sabrina Pryor, Air Sciences, to Dan Meyer, EPA, RE: 04-01-11 Phone Call Notes and Followup (Attachment: 04-01-11 EPA Environ Call Notes)
C-323	4/6/2011	Email from Alan Schuler, DEC, to Eric Hansen, ENVIRON, RE: Secondary Aerosol Formation
C-324	4/6/2011	Email from Suzanne Skadowski, EPA, to Nicole St. Amand, Shell, RE: Accepted: EPA / Shell Community Outreach Materials
C-325	4/7/2011	Email from Dan Meyer, EPA, to Roger Steen, Air Sciences, RE: Comments on March 29, 2011 Shell Kulluk Application Forms

EPA Exhibit Number	Date	Document Description
C-326	4/7/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Update - Modeler to Modeler Discussion on Kulluk and Disco Submittals
C-327	4/7/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Update - Permit Writers Discussion on Kulluk and Disco Permits
C-328	4/7/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Detailed Beaufort Lease Map (Attachment: Beaufort Leases Ownership 32x17 v2a)
C-329	4/7/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: 2010 Prudhoe Info for Shell
C-330	4/7/2011	Email from Peter Slaiby, Shell, to Doug Hardesty, EPA, RE: Shell Telephone Call Record for 8:30am on 3-24-11
C-331	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)
C-332	4/7/2011	Detailed Beaufort Map: - 1_Beaufort_Leases_Ownership_32x17_v2a - Detailed_Beaufort_Lease_Map - Detailed_Beaufort_Lease_Map_20110407
C-333	4/7/2011	Mixing Height Analysis: - 1_Mooring_Process_cover_letter - 2_Mooring_Process - 3_Combined - 4_Mixing_Height - 5_NSBasemapPBCH - FW_Shells_Action_Item_Submittals - Shells_Action_Item_Submittal
C-334	4/7/2011	Information Update - Description has changed: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
C-335	4/7/2011	Invitation: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
C-336	4/7/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
C-337	4/8/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: EPA Comments on March 29, 2011 Shell Kulluk Application Forms
C-338	4/8/2011	Email from Anthony Galligan, AECOM, to Christopher Hall, EPA, RE: Badami Zero concentration test
C-339	4/9/2011	Email from Andy Hawkins, EPA, to Ken Richmond, ENVIRON, RE: Calpuff Files for Disco (Attachment: memo-calpuff)
C-340	4/9/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: Permit Writers' 04 07 11 Call Notes (Attachment: 04-07-11 EPA Air Sciences Call Notes)
C-341	4/11/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Particulate Station Q4 2010 Monitoring Report
C-342	4/11/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Modelers Call minutes
C-343	4/11/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: 04 08 11 Call Notes - Please Review (Attachments: 04 08 11 EPA Airsciences Call Notes, 04 07 11 EPA Airsciences Call Notes R1, and 04 08 11 EPA Airsciences Call Notes R1)
C-344	4/11/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Call Today at 11 AST

EPA Exhibit Number	Date	Document Description
C-345	4/12/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: 04 08 11 Call Notes - Please Review (Attachments: 04 08 11 EPA Airsciences Call Notes, 04 07 11 EPA Airsciences Call Notes R1, and 04 08 11 EPA Airsciences Call Notes R1)
C-346	4/12/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: Kulluk Anchoring Process
C-347	4/12/2011	Email from Thomas Damiana, AECOM, to Brad Thomas, ConocoPhillips, RE: Deadhorse Particulate Station Q 4 2010 Monitoring Report (Attachment: Deadhorse_Hourly_Data_Quarter4_2010_Rev01)
C-348	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)
C-349	4/12/2011	Email from Alan Schuler, ADEC, to Pauline Ruddy, Shell, RE: OLM olmgroupp all question
C-350	4/13/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: Request for a Single Emission Unit or Source Group MMR Matrix
C-351	4/13/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Discoverer Mooring Process; Fuel limit; restrictions on location
C-352	4/13/2011	Email from Julie Vergeront, EPA, to Kirk Lilley, Kirk Lilley PLLC, RE: Discoverer Mooring Process; Fuel limit; restrictions on location
C-353	4/14/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: NO2 Modeling Question
C-354	4/15/2011	Email from Pauline Ruddy, Shell, to Dan Meyer, EPA, RE: Request for Check-In
C-355	4/17/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Clarification of Statement
C-356	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)
C-357	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)
C-358	4/18/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: Kulluk Beaufort - Draft potential emissions (Attachment: Kulluk Beaufort EI-NoORL 20110418a)
C-359	4/18/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Instructions for Paying Fees
C-360	4/18/2011	Email from Christopher Hall, EPA, to Steve Mackey, SLR Consulting, RE: NPAP and PEP audits for PSD monitoring stations
C-361	4/18/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Instructions for Paying Fees
C-362	4/18/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Instructions for Paying Fees
C-363	4/18/2011	Draft PTE: - 1_Kulluk_BeaufortEI-NoORL_20110418a - Kulluk_Beaufort-Draft_potential_emissions_a - Kulluk_Beaufort-Draft_potential_emissions
C-364	4/19/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: clear up application language in April 15 submittal
C-365	4/19/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: Emission Spreadsheet

EPA Exhibit Number	Date	Document Description
C-366	4/19/2011	Modeler Email: – FW Shell Items from April 7 th Modelers – Shell Items from April 7 th Modelers Call – To_EPA-04192011
C-367	4/20/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: Request for Electronic EI's
C-368	4/20/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: April 18 and 19 Phone Call Notes (Attachments: 04 19b 11 EPA Shell Call Notes, 18 11 EPA Shell Call Notes, and 04 19a 11 EPA Shell Call Notes)
C-369	4/20/2011	Email from Andy Hawkins, EPA, to Tim Martin, Air Sciences, RE: Shell Items From April 7 th Modelers Call (Attachment: AK Lease 201010 Disco Chukchi permit blocks)
C-370	4/20/2011	Email from Andy Hawkins, EPA, to Tim Martin, Air Sciences, RE: Shell Items from April 7 th Modelers Call (Attachment: To EPA - 04192011)
C-371	4/21/2011	Email from Brad Broker, SLR Consulting, to Christopher Hall, EPA, RE: Kaktovik (Attachment: Barter Island Overview with Potential AQ Sites)
C-372	4/21/2011	Email from Thomas Damiana, AECOM, to Nicole St. Amand, Shell, RE: Wainwright Permanent Station Annual 2010 Monitoring Report
C-373	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 not available)
C-374	4/21/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Action Item List (Attachment: Shell Action Items Table 4-20-11 DH)
C-375	4/21/2011	Email from Doug Hardesty, EPA, to Susan Childs, Shell, RE: New Disco-Kulluk Schedules
C-376	4/21/2011	Information Update - There are multiple changes: Call with Pete Slaiby, Shell Oil & Dennis McLerran, EPA R10
C-377	4/21/2011	Rescheduled: Call with Pete Slaiby, Shell Oil & Dennis McLerran, EPA R10
C-378	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)
C-379	4/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Additional information submittal for Disco PSD and Kulluk minor source (Attachments: Regulatory_Applicability MJS, 20110422_Monitoring_Methods_MatrixMJS, CIA-Discoverer-R1-2MJS Final, Kulluk_Beaufort_EI_AllowableAndPotential_20110421, OCS_BLOC, OCS_Blocks_28_Fig1_Detail_v2c, and anchor handling 2_final)
C-380	4/25/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Request for Telecon
C-381	4/27/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Instructions for Paying Fees (Attachments: Kulluk Air Permit Fee Check and Fee Filing Form-FF)

EPA Exhibit Number	Date	Document Description
C-382	4/27/2011	Air Permit Fees: <ul style="list-style-type: none"> - 1_Kulluk_Air_Permit_Fee_Check - 2_Fee_Filing_Form-FF - FW_Instructions_for_Paying_Fees - Instructions_for_Paying_Fees
C-383	4/27/2011	Email from Justin Greuel, EPA, to Carl Thiele, RE: Jack Up Rig Question
C-384	4/28/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: Kulluk Generator Engines
C-385	4/28/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Stack test data
C-386	4/18/2011	Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
C-387	4/29/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Alternate NO2 Modeling for Discoverer (Attachment: Alternate NO2 Modeling - Disco 04292011)
C-388	4/29/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Shell Action Item List (Attachment: Shell Action Items Table 4-28-11 DH)
C-389	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)
C-390	4/29/2011	Additional Application Information: <ul style="list-style-type: none"> - 1_Kulluk-AddAppInfo_FINALr1 - FW_Kulluk_Additional_App_Info - Kulluk_Additional_Application_Info
C-391	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
C-392	5/2/2011	Email from Alan Schuler, DEC, to Kirk Wings, ENVIRON, RE: Kulluk Additional Application Information
C-393	5/2/2011	Email from Dennis McLerran, EPA, to Doug Hardesty, EPA, RE: Confirmed - Call with Pete Slaiby, Shell-AK, and Dennis McLerran, EPA
C-394	5/3/2011	Email from Brad Broker, SLR Consulting, to Christopher Hall, EPA, RE: Kaktovik sites
C-395	5/4/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: EPA Tier 2 Emission Standards Listed in April 29, 2011 Submittal
C-396	5/4/2011	Email from Alan Schuler, DEC, to Tim Martin, Air Sciences, RE: Updates to Kulluk Impact Analysis (Attachment: Updated Impacts - Kulluk 05042011)
C-397	5/4/2011	Attachment C- pgs 17 And 18 <ul style="list-style-type: none"> - 1_AttC_Pages17and18 - FW_Kulluk Add Info - AttC - Kulluk Add Info - AttC
C-398	5/4/2011	Tier 2 Emission Standards: <ul style="list-style-type: none"> - EPA_Tier_2_Emission_Standards - Fwd_EPA_Tier_2_Emission_Standards
C-399	5/4/2011	Updated Impacts Memo: <ul style="list-style-type: none"> - 1_Updated_Impacts-Kulluk_05042011 - Memo-Updated_to_Kulluk_Impacts_Analysis - Memo-Updates_to_Kulluk_Impact_Analysis

EPA Exhibit Number	Date	Document Description
C-400	5/5/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: Kulluk additional information package submitted April 29 2011 - Attachment 2-C pages 17&18 (Attachment: AttC Pages17and18)
C-401	5/5/2011	Attachment 5 Matrix Explanation: – Email_RE Attach 5 Matrix Explanation – FWD_Attach 5 Matrix Explanation
C-402	5/6/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: NSPS Subpart IIII Flow Chart
C-403	5/6/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: ETP QAPP
C-404	5/6/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Link to BOEMRE Website for Camden Bay EP
C-405	5/6/2011	Email from Alessandra Carreon, ENVIRON, to Alan Schuler, DEC, RE: Access to File Transfer Portal at ENVIRON Corp.
C-406	5/6/2011	Disco Stack Test Reports
C-407	5/7/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Shell's Alternative Model Approval
C-408	5/7/2011	Email from Dennis McLerran, EPA to Pete Slaiby, Shell, RE: EPA Headquarters Approval of Shell's Alternative Model
C-409	5/8/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: NSPS Subpart CCCC Applicability (Attachment: SHELL OCS CISWI MEX EXEMPTION)
C-410	5/8/2011	Disco Fleet Stack Test Reports - Fleet 2010 Revision 2
C-411	5/9/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: limiting the HPU and air compressor engines (Attachment: IIII Flow Chart Kulluk)
C-412	5/9/2011	Email from Alan Schuler, DEC, to Rodger Steen, Air Sciences, RE: Hard-copy of April 29 th Kulluk Info
C-413	5/9/2011	Limiting the HPU and air compressor engines: – 1_IIII_FlowChart_Kulluk – FW_limiting HPU-air compressor engines – Email_RE limiting HPU-air compressor engines
C-414	5/10/2011	Email from Sabrina Pryor, Air Sciences, to Doug Hardesty, EPA, RE: Kulluk Application References (Attachments: KullukReferences 20110510, Kulluk EI Allowable Pgs2 and 9 20110509, and Shell 2010 Stack Testing Nox PM Summary 20110510)
C-415	5/10/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: EPA is Not Authorizing Logging Engines for Kulluk
C-416	5/10/2011	Email from Alan Schuler, DEC, to Tim Martin, Air Sciences, RE: Alan's New Email Address for Shell OCS Project
C-417	5/10/2011	Email from Sabrina Pryor, Air Sciences, to Doug Hardesty, EPA, RE: Kulluk Application References (Attachments: KullukReferences_20110510, KullukEIAAllowablePgs2and9_20110509, Shell2010StackTestingNOxPMSummary_20110510)
C-418	5/12/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Telephone Update
C-419	5/13/2011	Email from Tim Martin, Air Sciences, to Doug Hardesty, EPA, RE: Kulluk Portable Harddrives - May 4 th Submittal
C-420	5/13/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item List Updates (Attachment: Action Item Table 51311 Updates)

EPA Exhibit Number	Date	Document Description
C-421	5/13/2011	Proposed Revised Kulluk Emissions Inventory for SOB: – 1_Kulluk_EPA_SOB_EI_DRAFT – Proposed_Revised_Kulluk_EI_SOB_a – Proposed_Revised_Kulluk_EI_SOB
C-422	5/16/2011	Cancelled: Call with Pete Slaiby/Shell-AK and Michelle Pirzadeh/EPA
C-423	5/16/2011	Information Update - There are multiple changes: Call with Pete Slaiby/Shell-AK and Michelle Pirzadeh/EPA
C-424	5/16/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
C-425	5/16/2011	Email from Suzanne Skadowski, EPA, to Kristy Solomon, NSB, RE: EPA room rental June 16, 2001 public meeting (Attachment: InupiatHeritageCenter rental form_EPA June 16, 2011)
C-426	5/17/2011	Email from Dan Meyer, EPA, to Sabrina Pryor, Air Sciences, RE: Proposed Revised Kulluk EI for SOB (Attachment: Kulluk EPA SOB EI 20110513-DRAFT)
C-427	5/18/2011	Email from Kirk Lilley, Kirk Lilley PLLC, to Juliane Matthews, EPA, RE: Shell Chukchi Sea Exploration Plan
C-428	5/18/2011	506 Engine Replacement, Profiler QAPP and Engine replacement confirmation: – FwdProfilerQAP-Engine replacement – Email_RE ProfilerQAPP-Engine replacement
C-429	5/18/2011	517 Engine Clarification, Profiler QAPP and Engine replacement confirmation: – Fwd ProfilerQAPP-Engine replacement – Email_RE ProfilerQAPP-Engine replacement
C-430	5/19/2011	Email from Sabrina Pryor, Air Sciences, to Dan Meyer, EPA, RE: Request for Drilling Mud De-Gassing Methane Emissions Calculation (Attachment: Methane calc 20101022)
C-431	5/19/2011	Email from Pauline Ruddy, Shell, to Dan Meyer, EPA, RE: Question: Is Shell Still Seeking Authorization to Operate Existing EMD Main Generators
C-432	5/19/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Friday Telecon to discuss Stack Tests
C-433	5/19/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Profiler QAPP and Engine replacement confirmation
C-434	5/19/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Response to EAB comment on BOEMRE regulations
C-435	5/19/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Friday Telecon to discuss Stack Tests
C-436	5/19/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Profiler QAPP and Engine replacement confirmation
C-437	5/19/2011	Engine Clarification, Profiler QAPP and Engine replacement confirmation: – Fwd ProfilerQAPP-Engine replacement – Email_RE ProfilerQAPP-Engine replacement
C-438	5/19/2011	Request for Drilling Mud De-Gassing Methane Emissions Calculations – 1_Methane_calc_2010-10-22 – Methane_calc_20101022 – RE_Request-Drill Mud Degas Calc – Email_RE Request-Drill Mud Degas Calc
C-439	5/19/2011	Email from Suzanne Skadowski, EPA, to Thomasina Morris, NSBSD, RE: Facility Use (BHS) - EPA meetings with NSB, June 17

EPA Exhibit Number	Date	Document Description
C-440	5/20/2011	Email from Pauline Ruddy, Shell, to Dan Meyer, EPA, RE: Caterpillar C175-16 Engines
C-441	5/20/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Friday Telecon to discuss Stack Tests
C-442	5/20/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Mooring Process Teleconference
C-443	5/20/2011	Email from Tim Martin, Air Sciences, to Doug Hardesty, EPA, RE: Point Lay Ambient Air Quality Data (Attachment: Pt Lay Data (June - Nov 2010))
C-444	5/21/2011	Email from Pauline Ruddy, Shell, to Dan Meyer, EPA, RE: Caterpillar C175-16 Engines
C-445	5/21/2011	Caterpillar C175-16 Engines – Email_RE Cat C175-16_Engines – Fwd_Catr_C175-1_Engines
C-446	5/23/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Kulluk Final Package (Attachment: Kulluk Submittals List 20110523)
C-447	5/23/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Action Item list
C-448	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)
C-449	5/24/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: Request for Engine Information
C-450	5/24/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Action Item List (Attachment: Action Item Table 52311 Updates Rev 4)
C-451	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
C-452	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
C-453	5/25/2011	Letter from EPA, to North Slope Borough, Inupiat Community of the Arctic Slope, Alaska Eskimo Whaling Commission, Native Village of Barrow, City of Barrow, Native Village of Kaktovik, City of Kaktovik, Native Village of Nuiqsut, RE: Invitation to attend informational meetings on EPA air and water permits for oil and gas exploration
C-454	5/26/2011	Email from Dan Meyer, EPA, to Rodger Steen, Air Sciences, RE: Crane Engines - Closed Crankcase Ventilation System
C-455	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
C-456	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
C-457	5/31/2011	Email from Sabrina Pryor, Air Sciences, to Dan Meyer, EPA, RE: Request for Drilling Mud De-Gassing Methane Emissions Calculation (Attachment: Methane calc 20101022)
C-458	5/31/2011	Email from Rodger Steen, Air Sciences, to Dan Meyer, EPA, RE: Responses to your May 24 & May 26 Questions
C-459	5/31/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Final 'Clean' Package Description

EPA Exhibit Number	Date	Document Description
C-460	5/31/2011	Responses to your May 24 & May 26 questions – Responses_5-24_5-26_questions – Email_RE Responses_5-24_5-26_questions
C-461	5/31/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
C-462	5/31/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and Michelle Pirzadeh/EPA
C-463	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)
C-464	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)
C-465	6/7/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Update – EPA & Shell Air Call
C-466	6/7/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Discussion about EJ analysis
C-467	6/8/2011	Email from Mark Schindler, Octane, to Doug Hardesty, EPA, RE: Final ‘Clean’ Package Description
C-468	6/8/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Response to questions from R10
C-469	6/9/2011	Email from Julie Vergeront, EPA, to Doug Hardesty, EPA, RE: Document for record for CP and Kulluk (Attachment: 1992 part 70 RTC)
C-470	6/9/2011	Email from Doug Hardesty, EPA, to Mark Schindler, Octane, RE: Shell Kulluk Clean Application
C-471	6/9/2011	Email from Kirk Winges, ENVIRON, to Doug Hardesty, EPA, RE: Quick Conference call re: modeling
C-472	6/10/2011	Email from Eric Hansen, ENVIRON, to Dave Bray, EPA, RE: We’re on our way
C-473	6/10/2011	Email from Rebecca Van Wyck, SLR Consulting, to Christopher Hall, EPA, RE: Kaktovik Ambient Air and Meteorological Monitoring Program QAPP (Attachments: Appendix A, Appendix B, Appendix C, Appendix D, Kaktovik QAPP)
C-474	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
C-475	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)
C-476	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
C-477	6/11/2011	Email from Julie Vergeront, EPA, to Doug Hardesty, EPA, RE: 2 docs for record for all 3 permits (Attachments: 20071009 Broadwater LNG ambient air and 1980 costle letter)
C-478	6/13/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
C-479	6/13/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
C-480	6/13/2011	Email from Suzanne Skadowski, EPA, to Katarzyna Klimasinska, Bloomberg, RE: Urgent Re:[epa_arctic_permits] Air & Water Permits for Offshore

EPA Exhibit Number	Date	Document Description
C-481	6/15/2011	Email from Emma Pokon, NSB, to Doug Hardesty, EPA, RE: OCS air permit comment periods
C-482	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
C-483	6/15/2011	Email from Suzanne Skadowski, EPA, to Noe Teixeira, NSB, RE: 2011 North Slope Borough Directory?
C-484	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
C-485	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
C-486	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
C-487	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
C-488	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)
C-489	6/16/2011	Email from Roger Steen, Air Sciences, to Dan Meyer, EPA, RE: Stack test data summary (Attachment: Shell2010StackTestingSummary_20110520)
C-490	6/16/2011	Shell 2010 Stack Testing Summary: - 1_Shell 2010 Stack Test Summary - FW_limiting HPU-air compressor engines - Email_RE Stack_test_data_summary
C-491	6/16/2011	U.S. Environmental Protection Agency Public Meetings Flier, Barrow
C-492	6/16/2011	U.S. Environmental Protection Agency Public Meetings Flier, Barrow
C-493	6/16/2011	EPA Public Meeting Announcement, Inupiat Heritage Center
C-494	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
C-495	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
C-496	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
C-497	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
C-498	6/19/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Revised EPA policy on ambient air boundary
C-499	6/20/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Schedule for next couple of days
C-500	6/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Invitation - EPA discussion on Permit Conditions for GHG
C-501	6/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Rescheduled - EPA discussion on Permit Conditions for GHG

EPA Exhibit Number	Date	Document Description
C-502	6/22/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Thursday Call
C-503	6/22/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: kulluk open water modeling (Attachment: KullukMemorandumonAnchorHandlerOpenWater-final)
C-504	6/22/2011	Memorandum: Kulluk Anchor Handler during Open Water Conditions – 1_Kulluk Memo Anchor Handler Open Water – FW_kulluk_open_water_modeling – Email_RE 40ulluk-open-water-modeling
C-505	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)
C-506	6/27/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: OTM 13
C-507	6/27/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Please send permit to myself and Nicole
C-508	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])
C-509	6/27/2011	Information Update - Room has changed: Call with Pete Slaiby/Shell-AK and Dennis McLerran/EPA
C-510	6/27/2011	Rescheduled: Call with Pete Slaiby, VP, Shell AK
C-511	6/28/2011	Email from Alan Schuler, EPA, to Doug Hardesty, EPA, RE: Portable Hard-drive Received
C-512	6/28/2011	Email from John Iani, Perkins Coie, to Doug Hardesty, EPA, RE: (No Subject)
C-513	6/28/2011	Email from Pauline Ruddy, Shell, to Janet McCabe, EPA, RE: Invitation: Shell PM2.5 Increment Call
C-514	6/28/2011	Email from Nicole St. Amand, Shell, to Janet McCabe, EPA, RE: Invitation: Shell PM2.5 Increment Call
C-515	6/28/2011	Email from Nicole St. Amand, Shell, to Janet McCabe, EPA, RE: Invitation: Shell PM2.5 Increment Call
C-516	7/6/2011	Email from Janet McCabe, EPA, to Doug Hardesty, EPA, RE: Rescheduled: Shell PM2.5 Increment Call
C-517	6/30/2011	Email from Nicole St. Amand, Shell, to Doug Hardesty, EPA, RE: Final Kulluk Applications - Part 1 (Attachments: KullukOCSAppLtr_20110629 and KullukOCSApplication_20110629)
C-518	6/30/2011	Email from Sabrina Pryor, Air Sciences, to Doug Hardesty, EPA, RE: Final Kulluk Applications - Part 2 (Attachment: Kulluk Submittals_20110629-ReducedSize)
C-519	6/30/2011	Email from Pauline Ruddy, Shell, to Janet McCabe, EPA, RE: Invitation: Shell PM2.5 Increment Call (Jun 30 03:15 PM EDT in Janet's office)
C-520	6/30/2011	Email from Rodger Steen, Air Sciences, to Doug Hardesty, EPA, RE: Emission comparison Disco Beaufort 2010 to 2011 (Attachments: 2010vs2011DiscovererBeaufortEIComparison_20110630, 2010vs2011DiscovererBeaufortEIComparison_20110630)
C-521	7/6/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: PM2.5 call
C-522	7/7/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: fuel monitoring questions

EPA Exhibit Number	Date	Document Description
C-523	7/8/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: call
C-524	7/13/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Kulluk Draft Discussion with Shell
C-525	7/13/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Kulluk ice breaker additional modeling run (Attachment: Kulluk Iteration 02d Results_071211x)
C-526	7/15/2011	Email from Kirk Wings, ENVIRON, to Alan Schuler, EPA, RE: Kulluk Modeling Files Received (Attachment: 2011-07-15_Email_RE Kulluk Modeling Files Received)
C-527	7/15/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Timeline
C-528	7/15/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Draft Shell Kulluk OCS Permit
C-529	7/18/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and EPA
C-530	7/19/2011	Letter from Rick Albright, Office of Air, Waste and Toxics, to Susan Childs, Shell, RE: Shell Kulluk OCS Permit Application - Completeness Determination
C-531	7/20/2011	Email from Suzanne Skadowski, EPA, to Lilly Miller, Iisagvik College, RE: Iisagvik College Reservation Request Form - Dr. Tom Albert Conference Room
C-532	7/21/2011	Letter from Richard Albright, EPA, to Harry Brower, AEW, 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
C-533	7/22/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: EPA Press Release (Attachment: Kulluk completeness letter)
C-534	7/25/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Did you just try to call?
C-535	7/25/2011	Information Update - There are multiple changes: Call with Pete Slaiby/Shell-AK and EPA (Michelle P will be covering this call)
C-536	7/28/2011	Email from Pauline Ruddy, Shell, to Cindy Huang, EPA, RE: Request to cancel today's call
C-537	8/3/2011	Email from Suzanne Skadowski, EPA, to Brent Newell, CRPE, RE: Shell and Conoco Chukchi sea permits
C-538	8/11/2011	Email from Suzanne Skadowski, EPA, to Megan Williams, RE: request for administrative records
C-539	8/15/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and EPA
C-540	8/19/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Update - Discussion
C-541	8/22/2011	Email from Suzanne Skadowski, EPA, to Dawn Reeves, IWP News, RE: Shell permit question
C-542	8/23/2011	Email from Suzanne Skadowski, EPA, to David Hobstetter, Earthjustice, RE: FW: Modeling File Request for Conoco and Shell projects
C-543	8/24/2011	Email from Tauline Davis, Interior for Alaska Affairs, to Suzanne Skadowski, EPA, RE: EPA air permits hearings, August 26, 6pm & 8pm, Anchorage Public Library
C-544	8/24/2011	Email from Suzanne Skadowski, EPA, to David Hobstetter, Earthjustice, RE: Modeling File Request for Conoco and Shell projects

EPA Exhibit Number	Date	Document Description
C-545	8/24/2011	Email from Suzanne Skadowski, EPA, to David Hobstetter, Earthjustice, RE: Modeling File Request for Conoco and Shell projects
C-546	8/24/2011	Email from Lilly Miller, Iisagvik College, to Suzanne Skadowski, EPA, RE: Invitation: EPA Public Meeting
C-547	8/30/2011	Email from David Hobstetter, Earthjustice, to Suzanne Skadowski, EPA, RE: [RE: Modeling File Request for Conoco and Shell projects] PM2.5 modeling files for Kulluk
C-548	8/30/2011	Letter from Suzanne Skadowski, EPA, to Khanh Tran, RE: DVD with the Shell Kulluk modeling data files
C-549	8/31/2011	Email from Khanh Tran, to Suzanne Skadowski, EPA, RE: [RE: Modeling File Request for Conoco and Shell projects] PM2.5 modeling files for Kulluk plus NO 2
C-550	8/31/2011	Email from Khanh Tran, to Suzanne Skadowski, EPA, RE: [RE: Modeling File Request for Conoco and Shell projects] PM2.5 modeling files for Kulluk
C-551	9/1/2011	Email from Suzanne Skadowski, EPA, to David Hobstetter, Earthjustice, RE: NO2 Question
C-552	9/2/2011	Email from Suzanne Skadowski, EPA, to David Hobstetter, Earthjustice, RE: NO2 Question
C-553	9/2/2011	Email from Kirk Wings, ENVIRON, to Doug Hardesty, EPA, RE: Request Regarding Disco Met Data (Attachment: MetDataInfoReq_Final)
C-554	9/2/2011	Email from Kirk Wings, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 2 (Attachments: pt_lay_dec-jan2011, pt_lay_dec-feb2011)
C-555	9/2/2011	Email from Kirk Wings, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 1 (Attachments: pt_lay_sep-nov2010, pt_lay_sep-nov2010)
C-556	9/2/2011	Email from Kirk Wings, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 3 (Attachment: Shell Point Lay QAPP (Revision 1.1))
C-557	9/2/2011	Email from Kirk Wings, ENVIRON, to Doug Hardesty, EPA, RE: Email No. 4 (Attachment: RI_QAPP_rev_03_03_08_2010)
C-558	9/2/2011	Email from Kirk Wings, 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)
C-559	9/6/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Call Today?
C-560	9/6/2011	Information Update - Description has changed: Call with Pete Slaiby/Shell-AK and EPA
C-561	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)
C-562	9/6/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and EPA
C-563	9/7/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Clarification to your responses.
C-564	9/7/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Buoy had redundant wind sensors
C-565	9/8/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: call in information-sorry!
C-566	9/8/2011	Email from Julie Vergeront, EPA, to Lance Tolson, Shell, RE: EPA Interactions

EPA Exhibit Number	Date	Document Description
C-567	9/9/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Fw: Comments on Shell Kulluk Air Permit (Attachment: Native Village of Point Hope, Comment on Shell Kulluk Permit)
C-568	9/9/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Kulluk Comments
C-569	9/9/2011	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Clarification to your responses.
C-570	9/14/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Need EPA Referenced Document
C-571	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
C-572	9/15/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, Shell, RE: Call at 3pm AK Time
C-573	9/15/2011	Email from Doug Hardesty, EPA, to Pauline Ruddy, RE: EPA Document (Attachment: EPA-450 3-77-026 Offshore O&G Emissions)
C-574	9/15/2011	Email from Dave Newsad, to Doug Hardesty, EPA, RE: Mud degassing emissions factor info (Attachment: image6afc46.JPG, API- Table 5-17.pdf)
C-575	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)
C-576	9/16/2011	Email from Susan Childs, Shell, to Doug Hardesty, EPA, RE: PDF File Issues
C-577	9/20/2011	Email from Susan Childs, Shell, to EPA Region 10, RE: “ConocoPhillips Jackup Drill Rig - Chukchi Sea Exploration Drilling Program” (Permit No.R10OCS020000)
C-578	10/17/2011	Information Update - There are multiple changes: Call with Pete Slaiby/Shell-AK and EPA (Michelle Pirzadeh will do this call for Dennis McLerran)
C-579	12/27/2011	Rescheduled: Call with Pete Slaiby/Shell-AK and EPA
C-580	Undated	U.S. EPA Informational Meetings Summary - Air & Water permits for Arctic Oil & Gas Exploration
C-581	Undated	EPA Fax Transmittal from Suzanne Skadowski, EPA, to NSB and Villages, RE: Please Post - Public Meetings reminder and update

CC. Other Correspondence and Communication

EPA Exhibit Number	Date	Document Description
CC-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
CC-2	3/19/2008	Letter from Joyce C. Kelly, EPA, to Richard A. Wayland, EPA, 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
CC-3	8/4/2008	Letter from Joyce Kelly, EPA, to Susan Childs, Shell, RE: Meteorological Monitoring Protocol for Beaufort Sea and Site Visit
CC-4	8/27/2008	Email from Herman Wong, EPA, to Susan Childs, Shell, RE: the Met Monitoring Protocol
CC-5	9/11/2008	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Thanks!!
CC-6	9/16/2008	Email from Susan Childs, Shell, to Herman Wong, EPA, RE: Met Monitoring Protocol
CC-7	9/23/2008	Email from Alan Schuler, ADEC, to Herman Wong, EPA, RE: Shell and Conoco-Phillips AQ data collection options
CC-8	10/14/2008	Email from Herman Wong, EPA, to Pat Nair, EPA, RE: Conoco-Phillips Chukchi Sea Permitting – Wainwright Ambient Monitoring Program (Attachment: Wainwright Monitoring Station - Preliminary Proposal)
CC-9	10/14/2008	Email from Susan Childs, Shell, to Herman Wong, EPA, RE: Chukchi Sea Buoy Data Collection
CC-10	10/14/2008	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: ConocoPhillips Chukchi Sea Permitting – Wainwright Ambient Monitoring Program (Attachment: Wainwright Monitoring Station - Preliminary Proposal)
CC-11	10/15/2008	Email from Wayne Wooster, ASRC, to Warren Horowitz, MMS, RE: MMS-EPA-Shell Beaufort Sea Met Monitoring Meeting-Teleconference
CC-12	10/20/2008	Email from Wayne Wooster, ASRC, to Herman Wong, EPA, RE: MMS/EPA/Shell Beaufort Sea Met Meeting/Teleconference
CC-13	10/21/2008	Email from Susan Childs, Shell, to Herman Wong, EPA, RE: MMS-EPA-Shell Beaufort Sea Met Monitoring Meeting-Teleconference
CC-14	10/22/2008	Email from Alan Schuler, ADEC, to Herman Wong, EPA, RE: North Slope Background Data
CC-15	11/4/2008	Email from Susan Childs, Shell, to Herman Wong, EPA, RE: Beaufort Buoy Data Collection
CC-16	11/14/2008	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: ConocoPhillips Chukchi Sea Modeling – Meteorological Data Recovery and Missing Data Substitution (Attachments: Point Lay Wind Analysis 2003 through 2007, Wainwright Wind Analysis 2003 through 2007, Wainwright ASOS Data Capture)

EPA Exhibit Number	Date	Document Description
CC-17	11/17/2008	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Conoco-Phillips Wainwright Near-Term Monitoring Station AS-Built Photos (Wainwright Near-Term Monitoring Program Installation Photos)
CC-18	11/17/2008	Email from Herman Wong, EPA, to Christopher Hall, EPA, RE: ConocoPhillips Wainwright Near-Term Monitoring Station As-Built Photos (Attachment: Wainwright Near-Term Monitoring Program Installation Photos)
CC-19	11/18/2008	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Conoco-Phillips Wainwright Near-Term Monitoring Station QAPP
CC-20	11/18/2008	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: ConocoPhillips Wainwright Near-Term Monitoring Station QAPP
CC-21	12/22/2008	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: ConocoPhillips Wainwright Near-Term Monitoring Station QAPP
CC-22	1/21/2009	Email from Tim Martin, Air Sciences, to Pat Nair, EPA, RE: Beaufort Sea Meteorological Stations (Attachment: North Slope Stations 01082009)
CC-23	1/23/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA, RE: Shell OCS and Leasing Stipulations – MMS (Attachment: Stipulations Chukchi Sale 193)
CC-24	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 (Attachment: ShellMetCollectionOptions)
CC-25	2/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Meteorological and Air Quality Data Collection Programs Representative of the Beaufort Sea (Attachment: ShellMetCollectionOptions)
CC-26	2/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Conference Call for 3 February 2008: Meteorological and Air Quality Data Collection
CC-27	2/19/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Zipp and Zonen Observation
CC-28	2/19/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: ConocoPhillips Preliminary Monitoring Proposal (Attachment: Preliminary Wainwright Permanent Monitoring Scope of Work)
CC-29	2/24/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Zipp & Zonen Observation 2/23 - 2/25
CC-30	3/1/2009	Wainwright Near-Term Ambient Air Quality Monitoring Program, First Quarter Data Report, November 2008-January 2009, Prepared by AECOM
CC-31	3/13/2009	Email from Lance Tolson, Shell, to Julie Vergeront, EPA, RE: Information from Conference Call of 3/10 and Further Information on U.S. Coast Guard Temporary Safety Zone (Attachment: WASHINGTON-#5011604-v1-ltr to R10 counsel)

EPA Exhibit Number	Date	Document Description
CC-32	3/14/2009	Email from Mark Schindler, Octane, to Nancy Helm, EPA, RE: TSZ (Attachment: WASHINGTON TSZ-#5011604-v1-ltr to R10 counsel)
CC-33	3/17/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: UAF Beaufort Coast Offshore Data Collection Planned for Spring/Summer 2009
CC-34	3/18/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Quarterly Monitoring Report
CC-35	4/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Data format in the First Quarter Report
CC-36	4/6/2009	Letter from Peter Slaiby, Shell, to Rear Admiral Arthur E. Brooks, United States Coast Guard, RE: Request for Establishment of a Temporary Safety Zone around the Drillship <i>Frontier Discoverer</i> , Chukchi Sea, Alaska (Attachment: Attachment A - Chukchi Lease Location, Attachment B - <i>Discoverer's</i> Specifications, Attachment C - <i>Discoverer's</i> Anchor Spread, Attachment D - Alaska Vessel Traffic and Changing Arctic Ice Conditions, Attachment E - Environmental Protestors)
CC-37	4/7/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term Monitoring – March 2009 Monitoring Summary (Attachment: FINAL Wainwright Near-Term Monitoring February 2009 Report)
CC-38	4/10/2009	Email from Lance Tolson, Shell, to Julie Vergeront, EPA, RE: Shell Request for TSZ Around Drillship <i>Frontier Discoverer</i> (Attachments: 2009APR06 - USCG - Safety Zone Letter - FINAL, Attachment A - Chukchi Lease Locations, Attachment B - <i>Discoverer</i> Specs, Attachment C - <i>Discoverer</i> Anchor Spread, Attachment D - AK Vessell Traffic, Attachment E - Environmental Protestors)
CC-39	4/14/2009	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: 1020 Question
CC-40	4/27/2009	Email from Pat Nair, EPA, to Rodger Steen, Air Sciences, RE: Diverters
CC-41	4/28/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA, RE: Diverters
CC-42	5/4/2009	Email from Rodger Steen, Air Sciences, to Pat Nair, EPA, RE: Hydrocarbon Gas Released From Drilling Mud (Attachments: Propane calc-050109, EPA drill mud gas volume Rev 1)
CC-43	5/11/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Nov 08 to Jan09 Wainwright AQ Measurements (Attachments: nov08-jan09sum, nov08-jan09ERRfile)
CC-44	5/14/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: 2 nd Qtr Wainwright Audit Reports
CC-45	5/18/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Audit Reports (Attachments: Wainwright AdtRpt Mar09, 1 Wainwright AdtRpt Dec08)

EPA Exhibit Number	Date	Document Description
CC-46	7/1/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term Monitoring Station Renovation
CC-47	7/1/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term Monitoring Station Renovation
CC-48	7/1/2009	Wainwright Near-Term Ambient Air Quality Monitoring Program, Second Quarter Data Report, February through April 2009 Final, Prepared by AECOM
CC-49	7/8/2009	Email from Janis Hastings, EPA Region 10, to Susan Childs, Shell, RE: Background air quality data (Wainwright)
CC-50	7/13/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term Ambient Air Quality Monitoring Program Second Quarter Data Report
CC-51	7/13/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Wainwright 2 nd qtr air data
CC-52	7/14/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright 2 nd qtr air data
CC-53	7/14/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright 2 nd qtr air data
CC-54	7/15/2009	Email from Doug Bopray, AECOM, to Christopher Hall, EPA, RE: Wainwright Near-term Monitoring Project PM 2.5 flow data
CC-55	7/16/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA, RE: Background
CC-56	7/16/2009	Email from Herman Wong, EPA, to Christopher Hall, EPA, RE: Wainwright Near-Term Monitoring Program May 2009 Data Summary
CC-57	7/16/2009	Email from Christopher Hall, EPA, to Herman Wong, EPA, RE: Brief notes from call with AECOM on Tuesday
CC-58	7/17/2009	Email from Tim Martin, Air Sciences, to Herman Wong, EPA, RE: Background Concentrations (Attachment: Disco Major Chukchi Permit Application - Updated Background)
CC-59	7/23/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: PM Data Collection at Wainwright
CC-60	7/23/2009	Email from Herman Wong, EPA, to Dianne Soderlund, EPA, RE: Shell North Slope Site Visit-Trip Report
CC-61	7/23/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Near-term Monitoring Project PM2.5 Data
CC-62	7/27/2009	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: PM2.5 Collocated Sampling
CC-63	7/27/2009	Email from Doug Bopray, AECOM, to Christopher Hall, EPA, RE: Wainwright Near-Term Monitoring Project PM Concentration Data (Attachment: Wainwright Near-term Monitoring Raw PM Data)
CC-64	7/28/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Near-term Monitoring Project PM2.5 Data
CC-65	7/28/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Collocated FEM

EPA Exhibit Number	Date	Document Description
CC-66	7/28/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term June 2009 Data Summary (Attachments: wnt 0609, Final Wainwright Near-Term Monitoring June 2009 Report)
CC-67	7/28/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Near-Term Monitoring Project PM2.5 Data
CC-68	7/28/2009	Email from Christopher Hall, EPA, to dgobeli, RE: Zero offset for BAM 1020 (Attachment: Alaska site Raw PM Data)
CC-69	7/30/2009	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: North Slope Visit (Attachments: DSC00432, DSCN3877, DSC00395)
CC-70	8/4/2009	Email from Alan Schuler, ADEC, to Herman Wong, EPA, RE: North Slope Data
CC-71	8/12/2009	Email from Alan Schuler, ADEC, to Herman Wong, EPA, RE: PM2.5 Data
CC-72	8/17/2009	Email from Kirk Wings, ENVIRON, to Herman Wong, EPA, RE: Regional Emission Inventory (Attachment: Regional Emission Inventory)
CC-73	8/17/2009	Email from Herman Wong, EPA, to Alan Schuler, ADEC, RE: ADEC Verification
CC-74	8/19/2009	Email from Brad Thomas, ConocoPhillips, to Herman Wong, EPA, RE: Collocated PM 2.5 Monitors (Attachment: 20090819 Collocated PM 2.5 Letter to EPA)
CC-75	8/20/2009	Email from Christopher Hall, EPA, to Brad Thomas, ConocoPhillips, RE: Collocated PM 2.5 Monitors)
CC-76	8/25/2009	Email from Herman Wong, EPA, to Alan Schuler, ADEC, RE: Liberty Ambient Pollutant Data (Attachment: Endicott Findings Report)
CC-77	8/25/2009	Email from Thomas Damiana, ADEC, to Herman Wong, EPA, RE: Badami Station Commissioning
CC-78	8/26/2009	Email from Christopher Hall, EPA, to Herman Wong, EPA, RE: North Slope Particulate Summary (Attachment: North Slope Particulate Summary)
CC-79	8/26/2009	Email from Christopher Hall, EPA, to Thomas Damiana, ADEC, RE: Shell Badami Monitoring – Installation Audit
CC-80	8/26/2009	Email from Thomas Damiana, ADEC, to Herman Wong, EPA, RE: @ Badami – North Slope Particulate Summary
CC-81	8/31/2009	Email from Herman Wong, EPA, to Robert Elleman, EPA, RE: MMS surface- Meteorological buoy
CC-82	9/8/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Proposed Deadhorse Monitoring Location (Attachment: IMG 1023)
CC-83	9/11/2009	Letter from Matthew Cohen, Stoel Rives, to Bill Harnett, EPA, RE: PSD Increment Consumption on the Outer Continental Shelf (Attachments: Attachment A - Memo re Implementing PSD Baseline Dates Baseline Areas, and Baseline Concentrations on the Outer Continental Shelf in Alaska, Attachment B - EPA Statement of Basis for Proposed Outer Continental Shelf Prevention of Significant Deterioration)

EPA Exhibit Number	Date	Document Description
CC-84	9/14/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright First Quarter Report (Attachments: Final Wainwright Near-Term Monitoring Second Quarter Report rev02, Read Me, wnt 0209, wnt 0309, wnt 0409, wnt 0109, wnt 1108, wnt 1208)
CC-85	9/21/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: FEM FRM Designation
CC-86	9/21/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse FRM Sampler (Attachment: Model 2000-FRM rev 1007)
CC-87	9/22/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: North Slope Monitoring Station Map (Attachment: Alaska)
CC-88	9/23/2009	Email from Alan Schuler, ADEC, to Eric Hansen, Shell, RE: BPX North Slope PM10 Data (Attachment: CCP Site PM10)
CC-89	9/30/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term Monitoring August 2009 Monthly Report (Final Wainwright Near-Term Monitoring August 2009 Report)
CC-90	9/30/2009	Outer Continental Shelf Pre-Construction Air Permit Application - Frontier Discoverer Beaufort Sea Exploration Drilling Program, Prepared by ENVIRON
CC-91	10/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse PM2.5 Monitoring Design
CC-92	10/6/2009	Email from Mark Schindler, Octane, to Janis Hastings, EPA, RE: Collocated monitoring requirements
CC-93	10/13/2009	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: Validation and Summary of Wainwright Data Nov 08 to Jul 09 (Attachments: nov08-jul09, nov08-jul09)
CC-94	10/19/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Project DQOs
CC-95	10/20/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Project DQOs
CC-96	10/21/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Monitoring
CC-97	10/26/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: PEP Data (Attachments: PEP data 04-07, PEP data 04-09)
CC-98	10/26/2009	Email from Brad Thomas, ConocoPhillips, to Herman Wong, EPA, RE: Deadhorse Update (Attachment: 20091026 EPA Update)
CC-99	10/27/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Data
CC-100	10/28/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: CPAI-Wainwright Data
CC-101	10/28/2009	Email from Herman Wong, EPA, to Brad Thomas, ConocoPhillips, RE: Deadhorse Update
CC-102	10/28/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: CPAI-Wainwright Data (Attachment: Final Wainwright Near-Term Monitoring August 2009 Report, wnt 0809)

EPA Exhibit Number	Date	Document Description
CC-103	10/28/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami Data
CC-104	10/30/2009	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: Call on Monday, 02 November 2009
CC-105	10/30/2009	Email from Christopher Hall, EPA, to Linsey DeBell, AECOM, RE: 2005-06 Collocated PM2.5 data
CC-106	11/9/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Particulate Data (Attachment: Badami Edited Data 2009)
CC-107	11/9/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Badami Protocol (Attachment: Anser Monitoring Station Location Map)
CC-108	11/9/2009	Email from Mark Schindler, Octane, to Janis Hastings, EPA, RE: Badami Particulate Data
CC-109	11/13/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: State PM 2.5 Data (Attachments: PEP data 04-07, PEP data 04-09, State collocated data 07-09 all, State collocated data 07-09)
CC-110	11/13/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: Nuiqsut PM2.5 Data
CC-111	11/13/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami Particulate Data
CC-112	11/13/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: Badami Monitoring Station Quarterly Report
CC-113	11/13/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, RE: Badami Monitoring Station Quarterly Report
CC-114	11/13/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report
CC-115	11/13/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, RE: Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report
CC-116	11/13/2009	Letter from Jeffrey Walker, United States Department of the Interior, to Judith Bittner, Department of Natural Resources, RE: Archaeological Analysis of the OCS
CC-117	11/18/2009	Email from Linsey DeBell, AECOM, to Christopher Hall, EPA, RE: Deadhorse Statistical Approach
CC-118	11/18/2009	Email from Christopher Hall, EPA, to Linsey DeBell, AECOM, RE: Comments to date on Deadhorse QAPP
CC-119	11/18/2009	Email from Herman Wong, EPA to Janis Hastings, EPA Region10, RE: AQIA Handout at 17 November 2009 Meeting
CC-120	11/24/2009	Letter from Eric Hodek, AECOM, to Nicole St. Amand, Shell, RE: October 2009 Data Summary (Attachment: Monthly Data Summaries)
CC-121	11/25/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Revision to the Wainwright QAPP (Attachments: Wainwright Near-Term Appendix A - Rev 03, FINAL Wainwright Near-Term Ambient Monitoring QAPP rev01)

EPA Exhibit Number	Date	Document Description
CC-122	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 Sampler (Attachments: List of QAPP Revisions, Precision and Bias Assessment of PM2.5 Using a Collated Network Sampler (rev. no. 1), Assessment of PM2.5 Using a Collocated Network Sampler (rev. no. 1)
CC-123	11/25/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Revision to the Badami QAPP
CC-124	11/26/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: [TRANSFER REMINDER] Badami Monitoring Station Quarterly Report
CC-125	11/26/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, RE: [TRANSFER REMINDER] Badami Monitoring Station Quarterly Report
CC-126	11/26/2009	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: [TRANSFER REMINDER] Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report
CC-127	11/26/2009	Email from Eric Hodek, AECOM, to Dave Bray, EPA, RE: [TRANSFER REMINDER] Reindeer Island Monitoring Station and Oceanographic Station Quarterly Report
CC-128	11/30/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Particulate Monitoring QAPP Draft Rev 02 (Attachments: Deadhorse MQO Development, DRAFT Deadhorse QAPP-rev AECOM rev02)
CC-129	12/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse October through November 2009 Monitoring Summary (Attachment: FINAL Deadhorse Oct-Nov 2009Report)
CC-130	12/2/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Revision to the Wainwright QAPP (Attachments: Wainwright Near-Term Appendix A - Rev03, FINALWainwright Near-Term Ambient Monitoring QAPP rev01)
CC-131	12/2/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Particulate Monitoring QAPP Draft Rev 02 (Attachments: Deadhorse MQO Development, DRAFT Deadhorse QAPP-rev AECOM rev02)
CC-132	12/2/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Fourth Monitoring Quarter 2009 Data Summary (Attachments: Wainwright August through October Data, wnt 1009, wnt 0809, wnt 0909, Final Wainwright Near-Term Monitoring Fourth Quarter Report)
CC-133	12/2/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Wainwright Fourth Monitoring Quarter 2009 Data Summary (Attachments: Wainwright August through October Data rev01, wnt 0909, wnt 1009 rev01, wnt 1009)

EPA Exhibit Number	Date	Document Description
CC-134	12/3/2009	Email from Nicole St. Amand, Shell, to Janis Hastings, EPA, RE: Badami Monthly Report (Attachment: Badami October 2009 Summary)
CC-135	12/3/2009	Email from Eric Hodek, AECOM, to Herman Wong, EPA, RE: Badami Monthly Report (Attachment: Badami October 2009 Summary)
CC-136	12/4/2009	Email from Janis Hastings, EPA, to Christopher Hall, EPA, RE: Badami Monthly Report
CC-137	12/7/2009	Wainwright 4 th Monitoring Qtr Summary (Attachments: Wainwright August through October Data rev01, wnt 0809, wnt 0909, wnt 1009 rev01)
CC-138	12/7/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Precision and Bias Goals (Attachment: AECOM stddev bias equations)
CC-139	12/7/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: RSLO Deadhorse Draft QAPP Revision 2 Version (Attachment: RLSO - DRAFT Deadhorse QAPP-rev AECOM rev02)
CC-140	12/8/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Precision & Bias Goals
CC-141	12/9/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Precision & Bias Goals (Attachment: AECOM stddev bias equations)
CC-142	12/9/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Precision & Bias Goals
CC-143	12/9/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Revision01 – Deadhorse October through November 2009 Monitoring Summary (Attachment: FINAL Deadhorse Oct-Nov 2009Report rev01)
CC-144	12/9/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Precision & Bias Goals (Attachments: AECOM stddev bias equations, SLAMs Precision and Bias Percentiles, Deadhorse MQO Development 12 09 2009)
CC-145	12/10/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Precision and Bias Goals (Attachments: AECOM stddev bias equations, SLAMs Precision and Bias Percentiles, Deadhorse MQO Development 12 09 2009)
CC-146	12/10/2009	Email from Steve Mackey, Hoefler, to Christopher Hall, EPA, RE: Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-147	12/10/2009	Email from Steve Mackey, Hoefler, to Christopher Hall, EPA, RE: 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-148	12/11/2009	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-149	12/11/2009	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK
CC-150	12/11/2009	Email from Steve Mackey, Hoefler, to Christopher Hall, EPA, RE: 2 nd Question on PM2.5 Monitoring Collocation for Point Lay, AK

EPA Exhibit Number	Date	Document Description
CC-151	12/11/2009	Letter from Eric Hodek, AECOM, to Nicole St. Amand, Shell, RE: November 2009 Badami Summary (Attachment: Badami November 2009 Summary)
CC-152	12/14/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Tuesday Meeting
CC-153	12/14/2009	Email from Janis Hastings, EPA, to Pat Nair, EPA, RE: Badami November Report (Attachment: Badami November 2009 Summary)
CC-154	12/15/2009	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: Deadhorse October through November Monitoring Summary
CC-155	12/16/2009	Email from Rodger Steen, Air Sciences, to Dave Bray, EPA, RE: Wainwright PM2.5 Analysis (Attachment: Wainwright PM2.5 precip & wind stats)
CC-156	12/16/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Final Deadhorse QAPP (Attachments: FINAL Deadhorse QAPP, Deadhorse MQO Development FINAL)
CC-157	12/16/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: RLSO version of the Deadhorse QAPP (Attachment: RLSO FINAL Deadhorse QAPP)
CC-158	12/16/2009	Letter from Jeff Walker, United States Department of the Interior, to Julie Vergeront, EPA, RE: Minerals Management Service's view on "Regulated or Authorized Under OCSLA"
CC-159	12/17/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Nuiqsut Data
CC-160	12/17/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Wainwright QAPP(s)? (Attachment: Nuiqsut Data Format)
CC-161	12/17/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Help with your questions (Attachment: Nuiqsut Data Format)
CC-162	12/18/2009	Email from Rodger Steen, Air Sciences, to Dave Bray, EPA, RE: PM 2.5 & PM 10 Wainwright Statistics (Attachment: Wainwright PM25 & PM10 precip & wind stats)
CC-163	12/18/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse October November report revision 1 questions
CC-164	12/18/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: EPA Approval for the Deadhorse QAPP (Attachment: FINAL Deadhorse QAPP approval page)
CC-165	12/18/2009	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse October November report revision 1 questions (Attachment: Deadhorse October November report)
CC-166	12/18/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Nuiqsut data (Attachment: Nuiqsut Data Format)
CC-167	12/18/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright QAPP(s)? (Attachment: Nuiqsut Data Format)

EPA Exhibit Number	Date	Document Description
CC-168	12/21/2009	Email from Herman Wong, EPA, to Christopher Hall, EPA, RE: Evaluation of Deadhorse data; 23 OCT 2009 to 29 NOV 2009 (Attachments: OCT09-NOV09, OCT09-NOV09, OCT09-NOV09, OCT09-NOV09, OCT09-NOV09)
CC-169	12/21/2009	Email from Mary Portanova, EPA, to Juliane Matthews, EPA, RE: Fw for Record: Modeling Files (Attachments: D_CO_all_src, D_CO_all_src, D_1hr_CO_all_src, O_SRN_Em)
CC-170	12/22/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Revision 02 – Deadhorse October through November 2009 Monitoring Summary (Attachments: FINAL Deadhorse Oct-Nov 2009Report rev02, BAM1 Zero Concentration test November 21, 2009, BAM2 Zero Concentration test November 26, 2009, Region 10 Deadhorse Preliminary PM Data Analysis Oct-Nov 2009)
CC-171	12/22/2009	Email from Eric Hodek, AECOM, to Janis Hastings, EPA, RE: Badami Monitoring Report (Attachment: Badami Q4 Summary)
CC-172	12/22/2009	Email from Janis Hastings, EPA, to Mary Portanova, EPA, RE: Badami Monitoring Report
CC-173	12/23/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Comments to date on Deadhorse QAPP (Attachment: IML December 23, 2009 Responses to Region 10)
CC-174	12/23/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Near-Term Monitoring Flow Checks (Attachment: December 23, 2009 Particulate Flow Check Clarification)
CC-175	12/23/2009	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Nuiqsut data (Attachments: nuqq1 08, Qtr 1 2008 Monitoring Report, nuqq2 08, Qtr 2 2008 Monitoring Report, nuqq3 08, Qtr 3 2008 Monitoring Report, Nuqq4 08, Qtr 4 2008 Monitoring Report, nuqq1 09, Qtr 1 2009 Monitoring Report, nuqq2 09, Qtr 2 2009 Monitoring Report)
CC-176	12/24/2009	Email from Herman Wong, EPA, to Christopher Hall, EPA, RE: Revision 2; Evaluation of Deadhorse Data from 23 Oct 2009 to 29 Nov 2009 (Attachments: OCT09-NOV09, OCT09-NOV09, OCT09-NOV09, OCT09-NOV09, OCT09-NOV09)
CC-177	12/28/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Meteorological Data Scanning and Validating (MSV) Program
CC-178	12/30/2009	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse December 2009 Monitoring Summary (Attachments: Region 10 Deadhorse Preliminary PM Data Analysis Dec 2009, FINAL Deadhorse Dec 2009Report rev00)
CC-179	12/30/2009	Email from Mark Schindler, Octane, to Natasha Greaves, EPA, RE: EPA/Shell Meeting Time and Date
CC-180	1/6/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami QAPP Revision 2
CC-181	1/6/2010	Email from Eric Hodek, AECOM, to Christopher Hall, EPA, RE: Badami 4 Month Report

EPA Exhibit Number	Date	Document Description
CC-182	1/7/2010	Email from Christopher Hall, EPA, to Eric Hodek, AECOM, RE: Badami Hourly Data
CC-183	1/11/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Fourth Monitoring Quarter 2009 Data Summary (Attachments: Final Wainwright Near-Term Monitoring Fourth Quarter Report rev02, wnt 0809, wnt 0909, wnt 1009)
CC-184	1/11/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term November and December 2009 Monthly Preliminary Data Summary (Attachments: Attachment 2 wnt 1109, Attachment 3 wnt 1209, Wainwright Near-Term Monitoring November and December 2009)
CC-185	1/11/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Sampling Frequency
CC-186	1/11/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Sampling Frequency
CC-187	1/11/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Near-Term November and December 2009 Preliminary Data Summary
CC-188	1/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Raw Data
CC-189	1/14/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami Raw Data
CC-190	1/14/2010	Email from Eric Hodek, AECOM, to Herman Wong, EPA, RE: Updated Data Spreadsheet for Submittal to EPA/Shell
CC-191	1/15/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: R10 Comments on the Badami QAPP Revision 2
CC-192	1/19/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Sampling Frequency
CC-193	1/19/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: R10 Comments on the Badami QAPP Revision 2
CC-194	1/20/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Sampling Frequency
CC-195	1/20/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Sampling Frequency
CC-196	1/21/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: R10 Comments on the Badami QAPP Revision 2
CC-197	1/21/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami PM2.5 Data Question
CC-198	1/21/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: R10 Comments on the Badami QAPP Revision 2
CC-199	1/25/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: R10 Comments on the Badami QAPP Revision 2
CC-200	1/26/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Sampling Schedule

EPA Exhibit Number	Date	Document Description
CC-201	1/26/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Thoughts on Deadhorse Sampling Schedule
CC-202	1/26/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: R10 Comments on the Badami QAPP Revision 2
CC-203	1/28/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami PM 2.5 Data Question
CC-204	1/29/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami Data Report
CC-205	2/5/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: R10 comments on Badami QAPP Revision 2
CC-206	2/8/2010	Memorandum from Christopher Hall, EPA, to Mary Portanova, EPA, RE: Badami Air Monitoring Data Review – August 15 through December 15, 2009
CC-207	2/12/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Data Set
CC-208	2/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami QAPP
CC-209	2/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Data Report
CC-210	2/16/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami QAPP (Attachment: Badami Ambient Monitoring QAPP rev02 01 28 2010)
CC-211	2/17/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Badami QAPP
CC-212	2/19/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami QAPP
CC-213	3/1/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Sampling Frequency
CC-214	3/1/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse Sampling Frequency
CC-215	3/9/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Wainwright Data
CC-216	3/12/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Wainwright Data
CC-217	3/12/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, Wainwright Data
CC-218	3/16/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Shell Reindeer Island QAPP (Attachment: Reindeer Island QAPP Revision)
CC-219	3/29/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, Final Reindeer Island QAPP
CC-220	3/30/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q4 Monitoring Report (Attachments: WPS 1209, WPS 0909, WPS 1009, WPS 1109, Final Wainwright Permanent Monitoring Report Q4 2009)

EPA Exhibit Number	Date	Document Description
CC-221	3/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Station Q4 2009 Monitoring Report
CC-222	3/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Near-Term Annual Data Summary (Attachments: Wainwright Data Report 2008, wnt 2009)
CC-223	4/1/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Coordinates for the Nuiqsut Station
CC-224	4/6/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Q4 Report
CC-225	4/7/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: Shell Point Lay QAPP Review
CC-226	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)
CC-227	4/7/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Q4 Report
CC-228	4/7/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Q4 Report
CC-229	4/27/2010	Email from Steve Mackey, Hoefler, to Herman Wong, EPA, RE: QAPP Submittal for Shell - Endicott/Endeavor Island Temperature Profiler Project
CC-230	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
CC-231	5/14/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Alaska PSD PEP/NPAP audits
CC-232	5/20/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non-federal travel funds
CC-233	5/25/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Monitoring QAPP
CC-234	5/25/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Monitoring QAPP
CC-235	6/15/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q1 2010 Monitoring Report
CC-236	6/18/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non-federal travel funds
CC-237	6/30/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Ethics requirements for EPA employees using non-federal travel funds
CC-238	7/7/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: potential PEP auditor contact
CC-239	7/8/2010	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: potential PEP auditor contact
CC-240	8/4/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: QAPP for the Shell Point Lay Air Monitoring System

EPA Exhibit Number	Date	Document Description
CC-241	8/12/2010	Email from Steve Mackey, Hoefler, to Christopher Hall, EPA, RE: Update on NPAP & PEP Audits
CC-242	8/13/2010	Email from J.B. Dennison, Hoefler, to Christopher Hall, EPA, RE: Nice talking with you
CC-243	8/17/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Station QAPP
CC-244	8/23/2010	Email from Herman Wong, EPA, to Roger Steen, Air Sciences, RE: Coordination between Shell and CPAI on WRF MMIF
CC-245	8/25/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Badami - 15 AUG 09 TO 31 DEC 09 (Attachments: AUG09-SEP09, AUG09-SEP09NOS, OCT09-DEC09, OCT09-DEC09NOS, 2009, and 2009NOS)
CC-246	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)
CC-247	8/25/2010	Email from Herman Wong, EPA, to Dominic Shallies, SLR Consulting, RE: Shell- Pt. Lay Monitoring Monthly Report
CC-248	8/26/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Call with BP
CC-249	8/27/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Collaboration and data collection
CC-250	9/5/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 2009 4 th Qtr Data Measurements at Wainwright Permanent (Attachments: AQ@2009 - 4thQtr and MET@2009 - 4thQtr)
CC-251	9/6/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: 2010 1 st Qtr Data Measurements at Wainwright Permanent (Attachments: AQ@2010 - 1stQtr and MET@2010 - 1stQtr)
CC-252	9/14/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: PM2.5 Collocation Question
CC-253	9/16/2010	Email from Christopher Hall, EPA, to Steve Mackey, Hoefler, RE: Proposed Teleconference on PM2.5 Collocation Frequency
CC-254	9/21/2010	Email from Steve Mackey, SLR Consulting, to Doug Hardesty, EPA, RE: Collocated Conference call with SLR/AECOM
CC-255	9/24/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: My highlights of 23 September 2010 Meeting
CC-256	9/24/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: My highlights of 23 September 2010 Meeting
CC-257	9/24/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: My highlights of 23 September 2010 Meeting
CC-258	9/24/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: sjvapcd no2/nox
CC-259	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)

EPA Exhibit Number	Date	Document Description
CC-260	9/28/2010	Email from Herman Wong, EPA, to Tim Martin, Air Sciences, RE: How about these words?
CC-261	10/18/2010	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Proposed Agenda Items
CC-262	10/20/2010	Email from Herman Wong, EPA, to Dominic Shallies, SLR Consulting, RE: Shell Monthly Reports for July , August 2010
CC-263	10/31/2010	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)
CC-264	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)
CC-265	11/14/2010	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse 2.5PM Station Q4 2009 Monitoring Report
CC-266	11/14/2010	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Reindeer Island and Badami Q 3 2010 Reports
CC-267	11/20/2010	Email from Herman Wong, EPA, to Kirk Winges, ENVIRON, RE: Conf. call
CC-268	11/22/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Agenda for 22 November 2010 Go To Meeting
CC-269	11/23/2010	Email from Herman Wong, EPA, to Ken Richmond, ENVIRON, RE: Agenda for 22 November 2010 Go To Meeting
CC-270	11/29/2010	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Permanent Station Q3 2010 Monitoring Report
CC-271	12/9/2010	Email from Robert Elleman, EPA, to Kirk Winges, ENVIRON, RE: early draft results
CC-272	12/13/2010	Email from Anthony Galligan, AECOM, to Janis Hastings, EPA, RE: Badami Annual Data Summary
CC-273	12/23/2010	Email from Thomas Damiana, AECOM, to Brad Thomas, ConocoPhillips, RE: Wainwright Approved QAPP
CC-274	1/11/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Annual Data and Report
CC-275	1/12/2011	Email from Herman Wong, EPA, to Thomas Damiana, AECOM, RE: Deadhorse PM2.5 Data
CC-276	1/13/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse 2.5PM Data
CC-277	1/16/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q1 2010 Monitoring Report
CC-278	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)

EPA Exhibit Number	Date	Document Description
CC-279	2/9/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q2 2010 Monitoring Report
CC-280	2/10/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse FRM Data
CC-281	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)
CC-282	2/11/2011	Email from Christopher Hall, EPA, to Thomas Damiana, AECOM, RE: Deadhorse 4 th Qtr FEM Data (Attachment: Deadhorse Hourly Data Quarter4 2009)
CC-283	2/22/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse FEM Data
CC-284	2/22/2011	Email from Herman Wong, EPA, to Kirk Wings, ENVIRON, RE: Response to your memo
CC-285	2/23/2011	Email from Herman Wong, EPA, to Nicole St. Amand, Shell, RE: Plan in case of winter weather
CC-286	2/24/2011	Email from Brad Broker, SLR, to Christopher Hall, EPA, RE: Deadhorse QAPP & other documentation
CC-287	3/1/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Deadhorse Particulate Station Q3 2010 Monitoring Report
CC-288	3/4/2011	Email from Anthony Galligan, AECOM, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report & Validated Data
CC-289	3/4/2011	Email from LeapFILE to Anthony Galligan, AECOM, RE: Badami Fourth Quarter 2010 Data Report & Validated Data
CC-290	3/4/2011	Email from LeapFILE to Anthony Galligan, AECOM, RE: wong.herman@epa.gov Successfully Downloaded Your Files
CC-291	3/4/2011	Email from Anthony Galligan, AECOM, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report
CC-292	3/4/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Digital Data
CC-293	3/5/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Fourth Quarter 2010 Data Report and Validated Data
CC-294	3/7/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Badami Shelter Temperature Data
CC-295	3/7/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Q4 2010 Data Report and Validated Data
CC-296	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))
CC-297	3/8/2011	Email from Herman Wong, EPA, to Anthony Galligan, AECOM, RE: Badami Validated Data for 8/15/09 through 12/31/2010
CC-298	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)

EPA Exhibit Number	Date	Document Description
CC-299	3/16/2011	Email from Thomas Damiana, AECOM, to Herman Wong, EPA, RE: Wainwright Permanent Station Q4 2010 Monitoring Report
CC-300	3/17/2011	Email from Anthony Galligan, Shell, to Doug Hardesty, EPA, RE: Badami Fourth Quarter 2010 Data Report and Validated Data
CC-301	3/30/2011	Email from Christopher Hall, EPA, to Brad Broker, SLR, RE: NPAP and PEP audits for PSD monitoring stations
CC-302	4/11/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Deadhorse Particulate Station Q4 2010 Monitoring Report
CC-303	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)
CC-304	4/18/2011	Email from Christopher Hall, EPA, to Steve Mackey, SLR, RE: NPAP and PEP audits for PSD monitoring stations
CC-305	4/21/2011	Email from Thomas Damiana, AECOM, to Christopher Hall, EPA, RE: Wainwright Annual 2010 Data Report
CC-306	4/21/2011	Email from Thomas Damiana, AECOM, to Brad Thomas, ConocoPhillips, RE: Wainwright Permanent Station Annual 2010 Monitoring Report
CC-307	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))
CC-308	5/20/2011	Email from Rebecca Van Wyck, SLR, to Christopher Hall, EPA, RE: Point Lay QAPP and Quarterly Data Summary Reports Submittals
CC-309	6/10/2011	Email from Rebecca Van Wyck, SLR, to Christopher Hall, EPA, RE: Kaktovik Ambient Air and Meteorological Monitoring Program QAPP
CC-310	6/21/2011	Email from Christopher Hall, EPA, to Brad Broker, SLR, RE: Pt Lay data review
CC-311	6/23/2011	Email from Christopher Hall, EPA, to J.B. Dennison, SLR, RE: Point Lay BAM 1020 monthly quality control checks
CC-312	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)
CC-313	8/31/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: nanuq
CC-314	8/31/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Nanuq visit

D. (Intentionally Left Blank)

EPA Exhibit Number	Date	Document Description

E. Endangered Species Act/Essential Fish Habitat

EPA Exhibit Number	Date	Document Description
E-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
E-2	6/23/2008	Programmatic Biological Opinion For Polar Bears (<i>Ursus maritimus</i>) On Beaufort Sea Incidental Take Regulations, Prepared by U.S. Fish and Wildlife Service
E-3	9/4/2009	Appendix B1, Final Chukchi PSD - ESA Attached Analysis, Evaluation and Basis of EPA Region 10's Determination Regarding Consultation Obligations under Section 7 of the Endangered Species Act and Section 305(b)(2) (essential fish habitat, i.e., EFH) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for the Shell Gulf of Mexico Inc. Outer Continental Shelf Air Permit
E-4	9/4/2009	Appendix B2, Letter from Janis Hastings, EPA, to Rosa Meehan, US Fish and Wildlife Service, RE: Informal consultation with your staff regarding the Clean Air Act permit we anticipate issuing to Shell Offshore Inc. for exploratory drilling in the Chukchi Sea.
E-5	9/4/2009	Appendix B3, Letter from Janis Hastings, EPA, to Deborah Rocque, US Fish and Wildlife Service, RE: Informal consultation with your staff regarding the Clean Air Act permit we anticipate issuing to Shell Offshore Inc. for exploratory drilling in the Chukchi Sea.
E-6	9/4/2009	Appendix B4, Letter from Janis Hastings, EPA, to Robert D. Mecum, NOAA, RE: Informal consultation with your staff regarding the Clean Air Act permit we anticipate issuing to Shell Offshore Inc. for exploratory drilling in the Chukchi Sea.
E-7	9/23/2009	Appendix C1, Letter from Deborah Rocque, US Fish and Wildlife Service, to Janis Hastings, EPA, RE: Shell Offshore Inc's Permit Request for Exploratory Drilling in the Chukchi Sea
E-8	9/24/2009	Appendix B5, Letter from Janis Hastings, EPA, to Robert D. Mecum, NOAA, Clarification of the US Environmental Protection Agency's (EPA) determinations regarding the potential effects of our Clean Air Act (CAA) permitting action on threatened and endangered (T&E) species within your jurisdiction.
E-9	10/1/2009	Environmental Assessment, Shell Offshore Inc. 2010 Outer Continental Shelf Lease Exploration Plan Camden Bay, Alaska, Beaufort Sea Leases OCS-Y-1805 and 1941, Prepared by Office of Leasing and Environment, Alaska OCS Region
E-10	10/26/2009	Appendix C2, Letter from Robert D. Mecum, NOAA, to Janis Hastings, EPA, RE: Potential effects of the Chukchi Sea
E-11	3/1/2010	Appendix D1, Letter from Janis Hastings EPA, to Deborah Rocque and Rosa Meehan, US Fish and Wildlife Service, RE: Informal discussions with your staff regarding the Clean Air Act (CAA) permit we anticipate issuing to Shell Offshore Inc (Shell) for exploratory drilling in the Beaufort Sea.

EPA Exhibit Number	Date	Document Description
E-12	3/1/2010	Appendix D2, Letter from Janis Hastings EPA, to Deborah Rocque and Rosa Meehan, US Fish and Wildlife Service, RE: Informal discussions with your staff regarding the Clean Air Act (CAA) permit we anticipate issuing to Shell Offshore Inc (Shell) for exploratory drilling in the Beaufort Sea.
E-13	3/1/2010	Appendix D3, Letter from Janis Hastings, EPA, to Robert D. Mecum, NOAA, RE: Informal discussions with your staff regarding the Clean Air Act (CAA) permit we anticipate issuing to Shell Offshore Inc (Shell) for exploratory drilling in the Beaufort Sea.
E-14	3/30/2010	Appendix E1, Letter from James Balsiger, NOAA, to Janis Hastings, EPA, RE: The National Marine Fisheries Service (NMFS) review of the March 1, 2010 letter concerning the potential effects on endangered and threatened species and Essential Fish Habitat (EFH) due to authorization of a Clean Air Act permit to Shell Gulf of Mexico, Inc. for an exploratory drilling activity in the U.S. Beaufort Sea, to be conducted in 2010.
E-15	4/5/2010	Appendix E2, Letter from Ted Swen, US Fish and Wildlife Service, to Janis Hastings, EPA, RE: Shell Offshore Inc's Permit Request for Exploratory Drilling in the Beaufort Sea
E-16	4/21/2011	Air Sciences, Inc. Engineering Calculations, Summary of Allowable and Potential Emissions
E-17	4/29/2011	Letter from Susan Childs, Shell, to Doug Hardesty, EPA, RE: OCS Permit Application, Conical Drilling Unit Kulluk, Beaufort Sea, Alaska Additional Application Information
E-18	4/29/2011	Appendix A, OCS Lease Blocks Map – Prudhoe Bay Area, Alaska and Camden Bay Exploration Plan Location Map
E-19	6/8/2011	Memorandum from Madonna Narvaez, OAWT, 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
E-20	7/25/2011	Letter from Janis Hastings, OAWT, to Fred King, BOEMRE, RE: continuation of informal discussions with BOEMRE staff regarding the Clean Air Act (CAA) permits proposed to issue to Shell Offshore Inc.
E-21	7/25/2011	Letter from Janis Hastings, OAWT, to Ted Swen, US Fish and Wildlife Service, RE: Shell -Evaluation of the potential effects of air permits issued under the Clean Air Act (CAA) on candidate species and designated critical habitat.
E-22	7/25/2011	Letter from Janis Hastings, OAWT, to Kaja Brix, NMFS, RE: Shell - evaluation of the potential effects of air permits issued under the Clean Air Act (CAA) on proposed and listed species
E-23	7/25/2011	Evaluation and Basis for EPA Region 10's Endangered Species Act (ESA) Section 7 and Magnuson-Stevens Fishery Conservation and Management Act (MSA) Section 305(b)(2) Determinations for the Shell Offshore Inc. and Shell Gulf of Mexico, Inc. Beaufort and Chukchi Seas Exploration Drilling Program Air Permits – Noble Discoverer and Kulluk

EPA Exhibit Number	Date	Document Description
E-24	8/2/2011	Letter from Ted Swem, U.S. Department of the Interior, to Janis Hastings, EPA, RE: ESA evaluation for Shell Beaufort Sea/Chukchi Sea, and ConocoPhillips Chukchi Sea air emissions permits
E-25	8/3/2011	Letter from Janis Hastings, EPA, to Kaja Brix, NOAA, 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
E-26	8/3/2011	Bureau of Ocean Energy Management, Regulation and Enforcement - Alaska OCS Region, Findings of no Significant Impact, Shell Offshore, Inc., Revised OCS Lease Exploration Plan, 2012
E-27	8/4/2011	Letter from Jeff Walker, U.S. Department of the Interior, to Susan Childs, Shell, RE: Shell's Revised OCS Lease
E-28	9/7/2011	Letter from Kaja Brix, NOAA, to Janis Hastings, EPA, RE: Clean Air Act Permits

EE. Other Endangered Species Act/Essential Fish Habitat

EPA Exhibit Number	Date	Document Description
EE-1	8/1/1993	Guidelines for Oil and Gas Operations in Polar Bear Habitats, AK OCS Study, MMS93-0008, Prepared by Ecological Research Associates
EE-2	6/1/2006	Environmental Assessment - Final Rule to Authorize the Incidental Take of Small Numbers of Polar Bear (<i>Ursus maritimus</i>) and Pacific Walrus (<i>Odobenus rosmarus divergens</i>) During Oil and Gas Activities in the Beaufort Sea and Adjacent Coastal Alaska, Prepared by U.S. Fish and Wildlife Service
EE-3	6/16/2006	United States Department of Commerce, National Oceanic and Atmospheric Administration Document, RE: National Marine Fisheries Service's (NMFS) Biological Opinion for Federal oil and gas leasing and exploration by the Minerals Management Service (MMS) within the Alaskan Beaufort and Chukchi Seas, Prepared by Hohn Goll, MMS Alaska OCS Region
EE-4	8/2/2006	Federal Register, 71 FR 43926, Final Rule, Marine Mammals; Incidental Take During Specified Activities
EE-5	12/21/2006	Range-Wide Status Review of the Polar Bear (<i>Ursus maritimus</i>), Prepared by Scott Schliebe, U.S. Fish and Wildlife Service
EE-6	1/1/2007	The Marine Mammal Protection Act of 1972, As Amended 2007
EE-7	1/9/2007	Federal Register, 72 FR 1064 (January 9, 2007), Proposed Rule to List the Polar Bear (<i>Ursus maritimus</i>) as Threatened Throughout Its Range
EE-8	1/30/2007	Letter from Robert Mecum, NMFS, to John Goll, MMS, RE: MMS Draft EIS for Chukchi Planning Area
EE-9	3/28/2007	Memorandum from Regional Director - Region 7, U.S. Fish and Wildlife Service, to Regional Director, Mineral Management Service, RE: Chukchi Sea Lease Sale 193: Endangered Species Act Section 7 Consultation
EE-10	5/1/2007	Chukchi Sea Planning Area - Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, Final Environmental Impact Statement - Volume 1, Prepared by MMS
EE-11	5/1/2007	Chukchi Sea Planning Area - Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, Final Environmental Impact Statement - Volume 2, Prepared by MMS
EE-12	5/1/2007	Chukchi Sea Planning Area - Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, Final Environmental Impact Statement - Volume 3, Prepared by MMS
EE-13	3/19/2008	Environmental Assessment - Final Rule to Authorize the Incidental Take of Small Numbers of Pacific Walruses (<i>Odobenus rosmarus divergens</i>) and Polar Bears (<i>Ursus maritimus</i>) During Oil and Gas Industry Exploration Activities in the Chukchi Sea, Prepared by U.S. Fish and Wildlife Service
EE-14	5/1/2008	Fish and Wildlife Service (FWS) "Polar Bear (<i>Ursus maritimus</i>)"
EE-15	5/14/2008	FWS Memorandum, RE: "Expectations for Consultations on Actions that Would Emit Greenhouse Gases"

EPA Exhibit Number	Date	Document Description
EE-16	5/15/2008	73 Federal Register 28212 (May 15, 2008), Final Rule, Determination of Threatened Status for the Polar Bear (<i>Ursus maritimus</i>) Throughout Its Range
EE-17	5/15/2008	73 Federal Register 28306 (May 15, 2008), Interim Final Rule, Special Rule for the Polar Bear
EE-18	6/3/2008	Programmatic Biological Opinion for Polar Bears on Chukchi Sea Incidental Take Regulations
EE-19	6/11/2008	73 Federal Register 33212 (June 11, 2008), Final Rule, Marine Mammals; Incidental Take During Specified Activities
EE-20	7/17/2008	United States Department of Commerce, National Oceanic and Atmospheric Administration Document, RE: National Marine Fisheries Service's (NMFS) revised Biological Opinion for Federal oil and gas leasing and exploration by the Minerals Management Service (MMS) within the Alaskan Beaufort and Chukchi Seas, Prepared By John Goll, MMS Alaska OCS Region
EE-21	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
EE-22	1/8/2009	Letter from Rose Meehan, US Fish and Wildlife Service, to Susan Childs, Shell, 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
EE-23	5/1/2009	Shell Exploration Plan, 2010 Exploration Drilling Program OCS Lease Sale 193, Chukchi Sea (Volumes 1 - 3)
EE-24	6/1/2009	2010 Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska
EE-25	6/23/2009	Email from Nancy Helm, EPA, to Julie Vergeront, EPA, RE: 2010 OCS Exploration Plan Camden Bay PUBLIC COPY (Attachment: 2010 OCS Exploration Plan Camden Bay PUBLIC COPY)
EE-26	6/26/2009	Letter from Robert Meecum, NMFS, to John Goll, MMS, RE: Essential Fish Habitat
EE-27	7/1/2009	Shell Exploration Plan, 2010 Exploration Drilling Program OCS Lease Sale 193, Chukchi Sea
EE-28	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
EE-29	7/27/2009	E-mail from Liz Doyle, EPA, to Dan Brown, EPA, RE: Your Request (Attachments: brownWise_Mutation-ResearchGenetic-Toxicology-and-Environmental_Mutagenesis, brownBump_Journal-of-Marine-Systems, brownEfroymsen_The-Science-of-The-Total-Environment, brownPratt_Chemosphere, and brownvan-Zanten_Biological-Conservation)

EPA Exhibit Number	Date	Document Description
EE-30	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)
EE-31	9/4/2009	Letter from Janis Hastings, EPA R10, to Rosa Meehan, U.S. Fish and Wildlife Service, Anchorage, AK, RE: Informal Consultation (Attachment: Evaluation and Basis of EPA R10's Determination Regarding Consultation Obligations)
EE-32	9/4/2009	Letter from Janis Hastings, EPA R10, to Deborah Rocque, U.S. Fish and Wildlife Service, Fairbanks, AK, RE: Informal Consultation (Attachment: Evaluation and Basis of EPA R10's Determination Regarding Consultation Obligations)
EE-33	9/4/2009	Letter from Janis Hastings, EPA R10, to Robert D. Mecum, NOAA, RE: Informal Consultation (Attachment: Evaluation and Basis of EPA R10's Determination Regarding Consultation Obligations)
EE-34	9/4/2009	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-35	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-36	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-37	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
EE-38	10/20/2009	Email from Jonathan Jemming, NSB, to Nancy Helm, EPA, RE: MMS Approves Shell Beaufort Sea Exploration Plan (Attachments: 2009_1015_EA, 2009_1015_FONSI, and 2009_1016_Eapproval)
EE-39	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
EE-40	12/3/2009	Letter from John Goll, MMS to Regional Director, U.S. Fish and Wildlife Service, Alaska Region, RE: Section 7 Endangered Species Act – Proposed Polar Bear Critical Habitat
EE-41	1/1/2010	Olfaction and Brain Size in the Bowhead Whale (<i>Balaena mysticetus</i>), Prepared by J. G. M. Thewissen, et al.
EE-42	1/19/2010	Email from Julie Vergeront, 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 from John Goll, MMS, to Regional Director, U.S. Fish and Wildlife Service, Alaska Region

EPA Exhibit Number	Date	Document Description
EE-43	3/29/2010	Memorandum from Richard Albright, EPA, RE: Chukchi GHG and ESA Section 7(a)(2) Compliance for Shell Chukchi OCS Permit
EE-44	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
EE-45	12/1/2010	Status Review of the Bearded Seal (<i>Erignathus barbatus</i>), Prepared by Michael F. Cameron, et al.
EE-46	12/7/2010	Federal Register [75 FR 76086-76137], Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Polar Bear (<i>Ursus maritimus</i>) in the United States, Final Rule
EE-47	12/10/2010	Federal Register [75 FR 77476-77495], Endangered and Threatened Species; Proposed Threatened Status for Subspecies of the Ringed Seal; Proposed Rule
EE-48	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
EE-49	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.
EE-50	1/1/2011	Fact Sheet - Pacific Walrus (<i>Odobenus rosmarus divergens</i>), Prepared by U.S. Fish and Wildlife Service
EE-51	1/1/2011	Status Review of the Pacific Walrus (<i>Odobenus rosmarus divergens</i>), Prepared by Joel Garlich-Miller, et al.
EE-52	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.
EE-53	2/1/2011	Fact Sheet - Pacific Walrus and the Endangered Species Act Fact Sheet, Prepared by U.S. Fish and Wildlife Service
EE-54	3/11/2011	Federal Register [76 FR 13454-13493], Marine Mammals; Incidental Take During Specified Activities, Proposed Rule
EE-55	Undated	Index Map 2 of 3 - Wainwright to Shishmaref, Final Designation of Critical Barrier Islands and Denning Habitat Maps
EE-56	Undated	Ice Seals: Frequently Asked Questions, Prepared by NOAA
EE-57	Undated	Pacific Walrus 12-month Finding - Questions and Answers, Prepared by the U.S. Fish and Wildlife Service
EE-58	Undated	Collection of Maps RE: Beaufort and Chukchi Seas Habitat
EE-59	Undated	Index Map 1 of 3 - U.S./Canada Border to Wainwright; Final Designation of Critical Barrier Islands and Denning Habitat Maps

F. Environmental Justice

EPA Exhibit Number	Date	Document Description
F-1	7/19/2011	Environmental Justice Analysis for Proposed Outer Continental Shelf Permit No. R10OCS030000, Kulluk Drilling Unit

FF. Other Environmental Justice

EPA Exhibit Number	Date	Document Description
FF-1	2/16/1994	Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629
FF-2	4/1/1996	1996 Environmental Justice Implementation Plan- EPA/300-R-96-004
FF-3	1/1/1999	Integrating Environmental Justice into EPA Permitting Authority (2000), Prepared by Richard Lazarus and Stephanie Tai, Ecology Law Quarterly Vol. 26, pp. 617-678
FF-4	7/20/2000	Environmental Justice in the Permitting Process, EPA/300-R-00-004
FF-5	11/6/2000	Executive Order 13175: Consultation and Coordination with Indian Tribal Governments, 65 Fed. Reg. 67249
FF-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
FF-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
FF-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.
FF-9	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
FF-10	11/1/2004	EJ Toolkit – Toolkit for Assessing Potential Allegations of Environmental Injustice. EPA 300-R-04-002.
FF-11	11/4/2005	Memorandum from Stephen L. Johnson, EPA, RE: Reaffirming EPA’s Commitment to Environmental Justice
FF-12	4/19/2006	Executive Order 13175: Review of EPA Draft Guidance for Implementing Executive Order 13175, 71 Fed. Reg. 20314
FF-13	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
FF-14	6/9/2008	Memorandum from EPA Administrator Stephen L. Johnson RE: Strengthening EPA Environmental Justice Program
FF-15	11/1/2008	Arctic Multiple Sale Draft EIS for MMS Multi-Sale Lease EIS, Appendix B
FF-16	2/12/2009	OEJ. 2009. EPA Office of Environmental Justice, Frequently Asked Questions http://www.epa.gov/compliance/resouces/faqs/ej/index.html#faq2
FF-17	4/1/2009	Regional Health Profile - Arctic Slope, Prepared by Alaska Native Epidemiology Center

EPA Exhibit Number	Date	Document Description
FF-18	6/23/2009	E-mail from Jonathan Jemming, EPA, to Ashley Zanolli, EPA, RE Request: EJ Listening Session for Shell OCS Permits – please respond with your availability
FF-19	6/26/2009	Transcript of EJ Call on OCS Permitting June 26, 2009 with Jonathan Jemming of the North Slope Borough
FF-20	6/26/2009	E-mail from Jonathan Jemming, EPA, to Ashley Zanolli, RE: Information Update!: EJ Listening Session for Shell OCS Permits – Agenda attached for Today’s 10AM call
FF-21	7/17/2009	E-mail from Ashley Zanolli, EPA, to Travis Carducci, ICAS, RE: 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
FF-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
FF-23	7/23/2009	Memo to File from Ashley Zanolli, EPA, RE: Meeting minutes from conference call with ICAS
FF-24	7/27/2009	Memo to file from Nancy Helm, EPA, RE: Early Outreach to North Slope Communities
FF-25	7/28/2009	EPA’s Environmental Justice Geographic Assessment Tool, Demographics profile for Atkasuk, Barrow, Kivalina, Kotzebue, Point Hope, Point Lay, Wainwright
FF-26	8/1/2009	Alaska Native Health Status Report, Prepared by Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium
FF-27	6/4/2010	Literature Review of North Slope Marine Traditional Knowledge, Prepared by Stephen R. Braund & Associates
FF-28	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
FF-29	Undated	Public Health and OCS Discharges: Review of Indirect Pathways, Prepared by Aaron Wernham, Northern Health Impact Resource Group
FF-30	Undated	Supplemental Environmental Justice Analysis for Proposed Outer Continental Shelf PSD, Prepared by EPA
FF-31	Undated	Talking Points - Environmental Justice Session at Alaska Forum on the Environment, Prepared by Price Leavitt, ICAS

G. Government-to-Government Consultation

EPA Exhibit Number	Date	Document Description
G-1	5/25/2011	Email from Suzanne Skadowski, EPA, to Tribal Presidents, Mayors and Leaders, RE: INVITATION: informational meetings on EPA air and water permits for oil and gas exploration, June 15-17, Kaktovik and Barrow (Attachments: EPA Arctic Permits Newsletter Summer 2011, EPA meeting invitation to North Slope May 25, 2011)
G-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
G-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
G-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
G-5	6/8/2011	Email from Sharon Darco, EPA, to Tami Fordham, EPA, RE: Shell letters (Attachments: Shell Letter Concur 6-2-2011, Arctic Air Permits Beaufort G2G-Inupiat-5.27.11, Arctic Air permits Beaufort G2G-Kaktovik-5.27.11, Arctic Air Permits Beaufort G2G-Nuiqsut-5.27.11, Beaufort Leases Ownership 32x17 v2a, Consultation Q BBAY, and EPA Arctic Permits Newsletter Summer 2011)

GG. Other Government-to-Government Consultation

EPA Exhibit Number	Date	Document Description
GG-1	11/8/1984	EPA Policy for the Administration of Environmental Programs on Indian Reservations
GG-2	2/1/2003	Office of Air Quality Consultation and Communication Procedures
GG-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
GG-4	5/1/2009	North Slope Communication Protocol: Communications Guidelines to Support Meaningful Involvement of the North Slope Communities in EPA Decision-Making, EPA Region 10, May 2009
GG-5	7/22/2009	Memorandum from EPA Administrator Lisa P. Jackson to All EPA Employees regarding EPA Indian Policy
GG-6	8/10/2009	R10 Tribal Consultation Framework
GG-7	2/27/2010	EPA Region 10: Tribal Consultation Framework
GG-8	5/4/2011	EPA Policy on Consultation and Coordination with Indian Tribes, Prepared by EPA
GG-9	Undated	EPA Region 10 Consultation Questionnaire, Prepared by EPA

H. Draft Title V Permit

EPA Exhibit Number	Date	Document Description
H-1	7/18/2011	U.S. EPA, Region 10, Technical Support Document, Review of Shell's Ambient Air Quality Impact Analysis for the Kulluk OCS Permit Application, Permit No. R10OCS030000
H-2	7/19/2011	Environmental Justice Analysis for proposed Outer Continental Shelf Permit No. R10OCS030000 Kulluk Drilling Unit
H-3	7/22/2011	Draft OCS Permit to Construct and Title V Air Quality Operating Permit
H-4	7/22/2011	U.S. EPA, Region 10, Statement of Basis for Draft OCS Permit to Construct and Title V Air Quality Operating Permit No.R10OCS030000 Shell Offshore, Inc. Conical Drilling

HH. Other Draft Title V Permit

EPA Exhibit Number	Date	Document Description
HH-1	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
HH-2	5/25/2011	Invitation to attend informational meetings on EPA air and water permits for oil and gas exploration – concurrence page
HH-3	6/1/2011	Arctic Permits Newsletter: Oil and gas exploration air and water permits, Prepared by EPA
HH-4	6/16/2011	Stakeholders Meeting Sign-in: Air/Water Beaufort Sea & Chukchi Sea Oil & Gas Exploration, Inupiat Heritage Center
HH-5	6/17/2011	EPA Informational Meeting Sign-in: Air/Water Permits for Oil & Gas Exploration, Barrow High School
HH-6	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 (Attachments: EPA_Public_Notice_Shell_Discoverer_Revised_Draft_Air_Permits_July_1_2011 and Ad Voucher (Anchorage Daily News 7-1-2011))
HH-7	6/30/2011	Email from Suzanne Skadowski, EPA, to Barry Anderson, Alaska News Papers, RE: EPA display ad public notice (Shell air permits) for July 4 or July 11, soonest possible (Attachments: EPA_Public_Notice_Shell_Discoverer_Revised_Draft_Air_Permits_July_1_2011 and Ad Voucher (Anchorage Daily News 7-1-2011))
HH-8	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
HH-9	7/1/2011	EPA Press Release: EPA seeks public comments on revised air quality permits for Shell's Arctic oil exploration activities
HH-10	7/1/2011	Email from Suzanne Skadowski, EPA, to Suzanne Skadowski, RE: [epa_arctic_permits] 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
HH-11	7/1/2011	Email from Suzanne Skadowski, EPA, to Barrett Ristroph, NSB, RE:, EPA seeks public comments July 6-August 5 on revised air quality permits for Shell Arctic oil exploration in Beaufort Sea and Chukchi Sea
HH-12	7/1/2011	Email from Suzanne Skadowski, EPA, to Claire Fishwick and Rebecca Smith, RE: please post public notice to ADEC webpage (Attachment: EPA Plain Text PUBLIC NOTICE July 1, 2011 Shell Discoverer Draft Air Permits)
HH-13	7/22/2011	Email from Suzanne Skadowski, EPA, to Claire Fishwick and Rebecca Smith, RE: please post Public Notice to ADEC web pages (EPA draft air permits for Shell Kulluk & Conoco) (Attachment: EPA public notice Shell Kulluk Conoco text for ADEC web July 22, 2011)
HH-14	7/22/2011	Email from Suzanne Skadowski, EPA, to Suzanne Skadowski, EPA, RE: [epa_arctic_permits] EPA seeks public comments on new air quality permits for Shell and ConocoPhillips Arctic oil exploration

EPA Exhibit Number	Date	Document Description
HH-15	7/22/2011	Email from Nattinee Nipataruedi, DEC, to Suzanne Skadowski, EPA, RE: please post Public Notice to ADEC web pages (EPA draft air permits for Shell Kulluk & Conoco)
HH-16	7/22/2011	Final Public Notice for Air Permits Proposed for Public Comment: Shell Kulluk Oil and Gas Exploration, Beaufort Sea, Alaska and ConocoPhillips Oil and Gas Exploration, Chukchi Sea, Alaska
HH-17	7/22/2011	Labels PUBLIC NOTICE ONLY-Shell Kulluk and Conoco
HH-18	7/22/2011	Labels INFO REPOSITORIES (public notice, permits, SOBs, applications (PAPER & CD)
HH-19	7/22/2011	Labels INFO REPOSITORIES (public notice, permits, SOBs, applications (PAPER & CD) - Kulluk and Conoco
HH-20	7/22/2011	Kulluk and ConocoPhillips Public Notice advertisement, Affidavit of Publication for the Anchorage Daily News
HH-21	7/22/2011	Mailing List - Permit Application Recipients and Information Repository
HH-22	7/22/2011	Mailing List - Public Notice Only
HH-23	7/22/2011	Email from Nattinee Nipataruedi, ADEC, to Suzanne Skadowski, EPA, RE: please post Public Notice to ADEC web pages (EPA draft air permits for Shell Kulluk & Conoco)
HH-24	7/22/2011	Email from Suzanne Skadowski, EPA, to Suzanne Skadowski, EPA, RE: [epa_arctic_permits] EPA seeks public comments on new air quality permits for Shell and ConocoPhillips Arctic oil exploration
HH-25	Undated	EPA 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
HH-26	Undated	Shell 2011 Supplemental Permit Application for Discoverer Permits
HH-27	Undated	Info Repository Note, Public Review Documents, Please make these documents available for review during the public comment period July 22 – September 6, 2011

I. Public Comments on 2011 Revised Draft Permits

EPA Exhibit Number	Date	Document Description
I-1	6/13/1989	Attachment to AWL Comments. U.S. EPA, Memorandum, Subject: Guidance on Limiting Potential to Emit in New Source Permitting
I-2	8/11/2010	Attachment to AWL Comments. Atmospheric Chemistry and Physics, Source identification of short-lived air pollutants in the Arctic using statistical analysis of measurement data and particle dispersion model output
I-3	7/2/2009	Attachment to AWL Comments. U.S. EPA, Memorandum, Subject: Implementing PSD Baseline Dates, Baseline Areas; and Baseline Concentrations on the Outer Continental Shelf in Alaska
I-4	1/1/2011	Attachment to AWL Comments. USGS, An Evaluation of the Science Needs to Inform Decisions on Outer Continental Shelf Energy Development in the Chukchi and Beaufort Seas, Alaska
I-5	3/18/2011	Attachment to AWL Comments. Report to Congress on Black Carbon, External Peer Review Draft, Department of the Interior, Environment, and Related Agencies Appropriations Act, 2010
I-6	3/18/2011	Attachment to AWL Comments. Discoverer Drillship Impact Evaluation for SO2 and NO2, Using AERMOD Chukchi and Beaufort Seas, Shell Alaska Exploratory Drilling Program, Prepared for Shell Offshore, Inc., Project No.
I-7	7/22/2011	Air Permits Proposed for Public Comment: Shell Kulluk Oil and Gas Exploration, Beaufort Sea, Alaska; ConocoPhillips Oil and Gas Exploration, Chukchi Sea, Alaska
I-8	7/22/2011	Attachment to AWL Comments. U.S. EPA, Region 10, Statement of Basis for Draft OCS Title V Air Quality Operating Permit No. R10OCS020000
I-9	7/25/2011	Email From Suzanne Skadowski, EPA, to JoJo Cheryl Brower, North-Slope, RE: Reserve NSB teleconference for EPA public meetings in Barrow August 23-24, 5-9pm?
I-10	7/25/2011	Email from Suzanne Skadowski, EPA, to Nancy McGuire, Nome Nugget, RE: Permits in the Alaskan arctic
I-11	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?
I-12	7/26/2011	Email from Suzanne Skadowski, EPA, to Doreen Lampe, NSB, RE: EPA air permits comment periods - response and meeting invitation
I-13	7/26/2011	Email from Suzanne Skadowski, EPA, to Andy Mack, NSB, RE: EPA air permits comment periods - response and meeting invitation
I-14	7/26/2011	Email from Suzanne Skadowski, EPA, to Gary Mendivil, ADEC, RE: Kulluk Air Permit Public Hearing Dates?
I-15	7/27/2011	Email from Suzanne Skadowski, EPA, to June Elavgak, RE: EPA air permits comment periods response and meeting invitation
I-16	7/27/2011	Email from Suzanne Skadowski, EPA, to Johnny Aiken, RE: EPA air quality permits for Shell and ConocoPhillips Arctic oil exploration

EPA Exhibit Number	Date	Document Description
I-17	7/27/2011	Email from Suzanne Skadowski, EPA, to June Elavgak, RE: EPA air permits comment periods response and meeting invitation
I-18	7/27/2011	Email from Suzanne Skadowski, EPA, to Johnny Aiken, RE: EPA air quality permits for Shell and ConocoPhillips Arctic oil exploration
I-19	7/27/2011	Email from Jason Custer, to Doug Hardesty, EPA, RE: Public Comments Re: Shell Kulluk Exploratory Drilling
I-20	8/1/2011	Public Comment Email from Doug Ward, to USEPA Region 10, RE: Alaska Outer Continental Shelf Permits
I-21	8/1/2011	Public Comment Email from Laurence P. Gebhardt, to USEPA Region 10, RE: Shell Discoverer Air Permits
I-22	8/1/2011	Public Comment Email from Hari-ji Baba, to USEPA Region 10, RE: Environment
I-23	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
I-24	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
I-25	8/3/2011	Public Comment Email from Mark Judson, to USEPA Region 10, RE: 2011 Revised Draft PSD Air Permits for Shell and ConocoPhillips drilling in the Chukchi Sea and Beaufort Seas
I-26	8/3/2011	Public Comment Email from Jim Pinckney, to USEPA Region 10, RE: oil and gas permits
I-27	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
I-28	8/3/2011	Public Comment Email from Al Turner, to USEPA Region 10, RE: Exploring in Alaska's OCS
I-29	8/3/2011	Public Comment Email from Don Bewley, to USEPA Region 10, RE: Support for Permit
I-30	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
I-31	8/10/2011	Email from Eskimo Whaler, to EPA Region 10, RE: Kulluk and Conoco Air Permits
I-32	8/10/2011	Alaska Outer Continental Shelf Permits Web Page
I-33	8/2/2011	Kulluk and ConocoPhillips Public Notice advertisement, Affidavit of Publication for the Arctic Sounder
I-34	8/21/2011	Email from Jill Simon, to EPA Region 10, RE: Don't allow drilling in Arctic
I-35	8/22/2011	Email from Paula & Robert Caywood, to EPA Region 10, RE: Air Permits for Shell & Conoco
I-36	8/22/2011	Email from Kathie Livesley, to EPA Region 10, RE: Drilling in the Arctic Seas

EPA Exhibit Number	Date	Document Description
I-37	8/22/2011	Email from Dorothy Lazar, to EPA Region 10, RE: drilling in the Chukchi and the Beafort
I-38	8/22/2011	Email from Philip D. Somervell, to EPA Region 10, RE: Permits for Oil/Gas drilling
I-39	8/23/2011	Kron Associates, Shell Kulluk public hearing transcript-Barrow
I-40	8/24/2011	Kron Associates, ConocoPhillips public hearing transcript-Barrow
I-41	8/25/2011	Email from Sandra Graf, to EPA Region 10, RE: Don't Allow Oil Drilling Ships To Pollute America 's Arctic Ocean
I-42	8/25/2011	Email from Lori Tritel, to EPA Region 10, RE: Don't Allow Oil Drilling Ships to Pollute America's Arctic Ocean
I-43	8/26/2011	Public Testimony Signup - Kulluk
I-44	8/26/2011	Kron Associates, ConocoPhillips public hearing transcript-Anchorage
I-45	8/26/2011	Kron Associates, Shell Kulluk public hearing transcript-Anchorage
I-46	8/26/2011	Email from Chris Ray, to EPA Region 10, RE: Drilling in the Arctic Ocean
I-47	8/31/2011	Letter from State of Alaska Department of Natural Resources, to EPA Region 10, RE: 2011 Revised Draft PSD Air Permits for Shell Kulluk Drillship Chukchi Sea and Beaufort Sea To Whom
I-48	8/31/2011	Email from Gloria Kron, to Suzanne Skadowski, EPA, RE: BARROW PUBLIC HEARINGS - teleconference recordings
I-49	9/2/2011	Letter from Shell, to EPA Region 10, RE: Shell Kulluk Air Permit (Draft OCS Permit to Construct and Title V Air Quality Operating Permit # RIOOCS030000) Shell Offshore Inc. Comments
I-50	9/2/2011	Email from Pauline Ruddy, Shell, to Doug Hardesty, EPA, RE: Shell Comment on Kulluk Draft OCS Construct and Title V Air Quality Minor Source Permit (Attachment: 2011-09-02 Shell Comments on Kulluk Air Permit No. R10OCS030000)
I-51	9/6/2011	Letter from Alaska Oil and Gas Association, to Dennis McLerran, EPA Region 10, RE: Draft Outer Continental Shelf Title V Clean Air Act Permit
I-52	9/6/2011	Letter from Native Village of Point Hope, to EPA Region 10, RE: Draft Air Permit No. R10OCS030000 for Shell's Proposed Kulluk Drilling Operations in the Beaufort Sea, Alaska
I-53	9/6/2011	Letter, via email, to EPA Region 10, RE: Draft Air Permit No. R10OCS030000 for Shell's Proposed Kulluk Drilling Operations in the Beaufort Sea, Alaska
I-54	9/6/2011	Letter from NSB, AEWG, and ICAS, to Doug Hardesty, EPA, RE: Draft Outer Continental Shelf Title V Clean Air Act Permit for Shell Offshore Inc.' s Exploratory Drilling in the Beaufort Sea with the Kulluk drill rig
I-55	9/6/2011	Letter from Roger Jenkins, to EPA Region 10, RE: Shell Kulluk Air Permit

EPA Exhibit Number	Date	Document Description
I-56	9/7/2011	Email from Carl Wassilie, to EPA Region 10, RE: Shell Kulluk Air Permit
I-57	9/7/2011	Email from Nikos Pastos, to EPA Region 10, RE: Center for Water Advocacy comments opposing Outer Continental Shelf (OCS) Title V Clean Air Act Permits for Shell Offshore Incorporated . Comment on Draft Air Permits for Shell Kulluk Oil and Gas Exploration , Beaufort Sea, Alaska
I-58	Undated	Shell Kulluk Air Permit Application Data Files Hard Drive List
I-59	Undated	14,500 identical or similar comments, RE: Don't Allow Oil Drilling Ships To Pollute America's Arctic Ocean
I-60	Undated	Attachment to AWL Comments. An Evaluation of the Science Needs to Inform Decisions on Outer Continental Shelf Energy Development in the Chukchi and Beaufort Seas, Alaska, Chapter 3
I-61	Undated	Attachment to AWL Comments. An Evaluation of the Science Needs to Inform Decisions on Outer Continental Shelf Energy Development in the Chukchi and Beaufort Seas, Alaska, Chapter 4

J. Final Title V Permit

EPA Exhibit Number	Date	Document Description
J-1	9/19/2011	Supplemental Response to Comments for Outer Continental Shelf Prevention of Significant Deterioration Permits - Noble Discoverer Drillship, Shell
J-2	10/21/2011	Shell Kulluk Final OCS Title V Air Permit
J-3	10/21/2011	U.S. EPA, Region 10, Response to Comments for OCS Permit to Construct and Title V Air Quality Operating Permit, Conical Drilling Unit Kulluk, Shell Offshore, Inc.
J-4	10/21/2011	U.S. EPA Region 10, Permit Notice Mailed to Commenters, RE: U.S. Environmental Protection Agency Region 10 today issued a final minor source/Title V Clean Air Act operating permit to Shell Offshore Inc. for oil and gas exploration drilling in the Beaufort Sea on the Outer Continental Shelf, Alaska.
J-5	10/21/2011	Email from Claire Fishwick, ADEC, to Suzanne Skadowski, RE: Please post EPA Public Notice to ADEC WebPages : Notice of Final Air Permit Issued to Shell (Kulluk)
J-6	10/21/2011	Email from Suzanne Skadowski, EPA, to Don B, RE: Re: Support for Permit
J-7	10/21/2011	Press Release, EPA issues final air permit to Shell Offshore Inc. for Arctic oil and gas exploration

K. COA-ADEC Regulations

EPA Exhibit Number	Date	Document Description
K-1	12/9/2010	18 AAC 50 Amended - IBR Final, Alaska Department of Environmental Conservation Requirements Applicable to OCS Sources
K-2	2/10/2011	Federal Register, 76 FR 7518 – Outer Continental Shelf Air Regulations Consistency Update for Alaska, Proposed Rule
K-3	6/27/2011	Federal Register, 76 FR 37274, Outer Continental Shelf Air Regulations Consistency Update for Alaska, Final Rule