

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 5, 2001

Greg Mattson, Business Unit Leader
Alaska New Developments
BP Exploration (Alaska) Inc.
P.O. Box 196612
Anchorage, AK 99519-6612

RE: Northstar Unit
Northstar Participating Area, Interim Approval

Dear Mr. Mattson:

On April 2, 2001, BP Exploration (Alaska), Inc. (BP), Unit Operator, applied to expand the Northstar Unit and form the Northstar Participating Area (Northstar PA) within the existing and expanded unit area. BP submitted the application on behalf of itself and Murphy Exploration (Alaska), Inc. (Murphy), the Working Interest Owners in the Northstar Unit. The Department of Natural Resources, Division of Oil and Gas (DNR or the Division as appropriate) and the U.S. Department of Interior, Minerals Management Service (MMS) approved the Northstar Unit Expansion Application effective July 25, 2001.

The April 2, 2001 Application to form the Northstar Participating Area (Application) included the following exhibits to the Northstar Unit Agreement (Agreement): Exhibit A, a schedule describing the Northstar Unit leases and ownership; Exhibit B/D, a map of the Northstar Unit and the proposed Northstar PA; Exhibit C, a schedule describing the Unit Tract Participation within the Northstar PA; Exhibit C-1, BP's proposed procedure for redetermination of Northstar PA Tract Participations; and Exhibit E, a schedule allocating Participating Area Expenses. The Application also included a draft Fourth Plan of Development (4th POD); a Proposed Outside Substances Agreement; and supporting geological, geophysical, and engineering data.

BP submitted supplemental information on July 11, 2001, August 1, 2001, September 18, and September 26, 2001. The September 26, 2001, *Final Supplemental Submission, Application for Formation of the Northstar Participating Area* (Final Submission) included revised Exhibits A, B/D, C, C-1, C-2, and E; the 4th POD; and an Outside Substances Agreement. Exhibit C-2, provides an example of the weighted average tract allocation calculation.

DNR accepts Exhibits A, B/D, C-2 and E enclosed with the Final Submission, to be true and correct as submitted; those exhibits are attached hereto as Attachments 1, 2, 5, and 6 respectively. Exhibit C, the proposed Unit Tract Participation Schedule, is approved with corrections to the legal descriptions of the state tracts, Attachment 3 to this decision. The Northstar PA is limited to the 17,667.00 acres described in Exhibit C and depicted in Exhibit D.

Following the Final Submission, DNR, MMS, and the Working Interest Owners proposed further revisions to Exhibits C-1, the 4th POD, and the Outside Substances Agreement. The Working Interest Owners, MMS and DNR have agreed to the terms and conditions set out in Attachments 4, 7 and 8 to this decision.

Attachment 4, Exhibit C-1, incorporates a number of changes to the redetermination procedures including but not limited to:

- 1) application of a weighted average concept in certain instances if DNR and MMS do not approve identical Unit Tract Participations;
- 2) allowing for an extension of the deadline for the Final Redetermination, if necessary to acquire sufficient production data; and
- 3) application of redetermination procedures if DNR and MMS approve an expansion or contraction of the Northstar PA.

Attachment 7, amends the 4th POD to require that an exploration well be at least ½ mile from the Northstar PA to fulfill the drilling obligation.

Attachment 8, the Outside Substances Agreement, outlines the treatment of injected dry gas originally produced from the Prudhoe Bay Unit with revisions to the Unit Operator and the Working Interest Owner reporting requirements.

The Division reviewed the statutes, oil and gas unitization regulations, the Northstar Unit Agreement, and materials supplied by BP in support of the application. The Application, with the conditions contained in Attachments 1-8 to this decision, meets the criteria in 11 AAC 83.303. The Working Interest Owners have agreed to the conditions set out in Attachments 1-8 to this decision, and DNR approves the Application under the terms and conditions set out in those Attachments. Approval of the Application, with the conditions contained in Attachments 1-8 to this decision, is necessary and advisable in the public interest to conserve natural resources, avoid waste, and protect the interest of all interested persons including the state and the public.

In the Final Submission, BP stated,

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We anticipate that Sustained Unit Production from the Northstar Participating Area will begin within weeks. We request that the Northstar Participating Area be effective the day following issuance of a decision approving the same. We further request that a decision be issued prior to October 1, 2001 in order to allow time to prepare for field start-up.

BP submitted the Application six months ago, but the parties were unable to reach agreement before October 1, 2001. DNR is issuing this interim decision today to prevent delaying the commencement of production from the Northstar Reservoir, and will issue the Commissioner's Findings and Decision with a complete evaluation of the Application in the near future. The effective date of the Northstar PA will be 12:01 a.m. on the day following approval by DNR and MMS.

Assuming that the conditions set forth in this letter are acceptable to the Working Interest Owners, you are authorized to commence production from the Northstar Reservoir after MMS issues its concurrent approval.

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of "issuance" of this decision, as defined in 11 AAC 02.040 (c) and (d), and may be mailed or delivered to Pat Pourchot, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918; or sent by electronic mail to dnr_appeals@dnr.state.ak.us. This decision takes effect immediately. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 31st day after issuance. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

Sincerely,

Original Signed by Mark D. Myers, Director

Mark D. Myers
Director

Enclosure: Attachment 1, Description of Northstar Unit Leases and Ownership, Exhibit A
Attachment 2, Map of the Northstar Unit and Northstar PA, Exhibit B/D
Attachment 3, Northstar PA Tract Allocation Schedule, Exhibit C
Attachment 4, Redetermination Procedures in Exhibit C-1
Attachment 5, Weighted Average Sample Calculation, Exhibit C-2
Attachment 6, Allocation of Northstar PA Expense, Exhibit E
Attachment 7, 4th POD
Attachment 8, Outside Substances Agreement

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cc: Rance Wall, MMS Regional Supervisor
Pete Zselezky, BP Land Manager
Richard Todd, Dept. of Law

NSPA Interim Approval 10501CL.doc

**EXHIBIT A
NORTHSTAR UNIT AGREEMENT
DESCRIPTION OF NORTHSTAR UNIT LEASES AND OWNERSHIP**

Unit Tract No.	Lease No.	Sale Tract No. and Legal Description	Acreage	Royalty	Net Profit Share	ORRI (%)	BP %	Murphy %
TR-101	ADL 312798	Tract C30-46 (BF-46) <u>T. 14 N., R. 13 E., Umiat Meridian, Alaska</u> <u>T. 13 N., R. 13 E., Umiat Meridian, Alaska</u> Tract C30-46 (BF-46) is a portion of Blocks 470 and 514 as shown on the "Leasing and Nomination Map" for the Federal/State Beaufort Sea Oil and Gas Lease Sale, dated 1/30/79.	4,392.82	20% + Supplemental Royalty+E10	None	None	100.00	0.00
TR-102	ADL 312799	Tract C30-47 (BF-47) <u>T. 14 N., R. 13 E., Umiat Meridian, Alaska</u> <u>T. 13 N., R. 13 E., Umiat Meridian, Alaska</u> Tract C30-47 (BF-47) is a portion of Blocks 471 and 515 as shown on the "Leasing and Nomination Map" for the Federal/State Beaufort Sea Oil and Gas Lease Sale, dated 1/30/79.	4,472.37	20% + Supplemental Royalty	None	None	100.00	0.00
TR-103	ADL 312808	Tract C30-56 (BF-56) <u>T. 13 N., R. 13 E., Umiat Meridian, Alaska</u> Tract C30-56 (BF-56) is a portion of Blocks 514, 515, 558 and 559 as shown on the "Leasing and Nomination Map" for the Federal/State Beaufort Sea Oil and Gas Lease Sale, dated 1/30/79.	3,432.92	20% + Supplemental Royalty	None	None	100.00	0.00
TR-104	ADL 312809	Tract C30-57 (BF-57) <u>T. 13 N., R. 13 E., Umiat Meridian, Alaska</u> <u>T. 13 N., R. 14 E., Umiat Meridian, Alaska</u> Tract C30-57 (BF-57) is a portion of Blocks 516 and 560 as shown on the "Leasing and Nomination Map" for the Federal/State Beaufort Sea Oil and Gas Lease Sale, dated 1/30/79.	5,301.38	20% + Supplemental Royalty	None	None	100.00	0.00
TR-105	ADL 355001	Tract 39-01 <u>T. 13 N., R. 13 E., Umiat Meridian, Alaska</u> Section 17, Protracted, All, 640 acres; Section 18, Protracted, All, 631 acres; Section 19, Protracted, All, 633 acres; Section 20, Protracted, All, 640 acres; Section 25, Protracted, All, 640 acres; Section 26, Protracted, All, 640 acres; Section 27, Protracted, All, 640 acres; Section 28, Protracted, All, 640 acres; Section 29, Protracted, All, 640 acres.	5,744.00	20% + Supplemental Royalty	None	2	100.00	0.00
SUBTOTAL OF STATE ACREAGE			23,343.49					

**EXHIBIT A
NORTHSTAR UNIT AGREEMENT
DESCRIPTION OF NORTHSTAR UNIT LEASES AND OWNERSHIP**

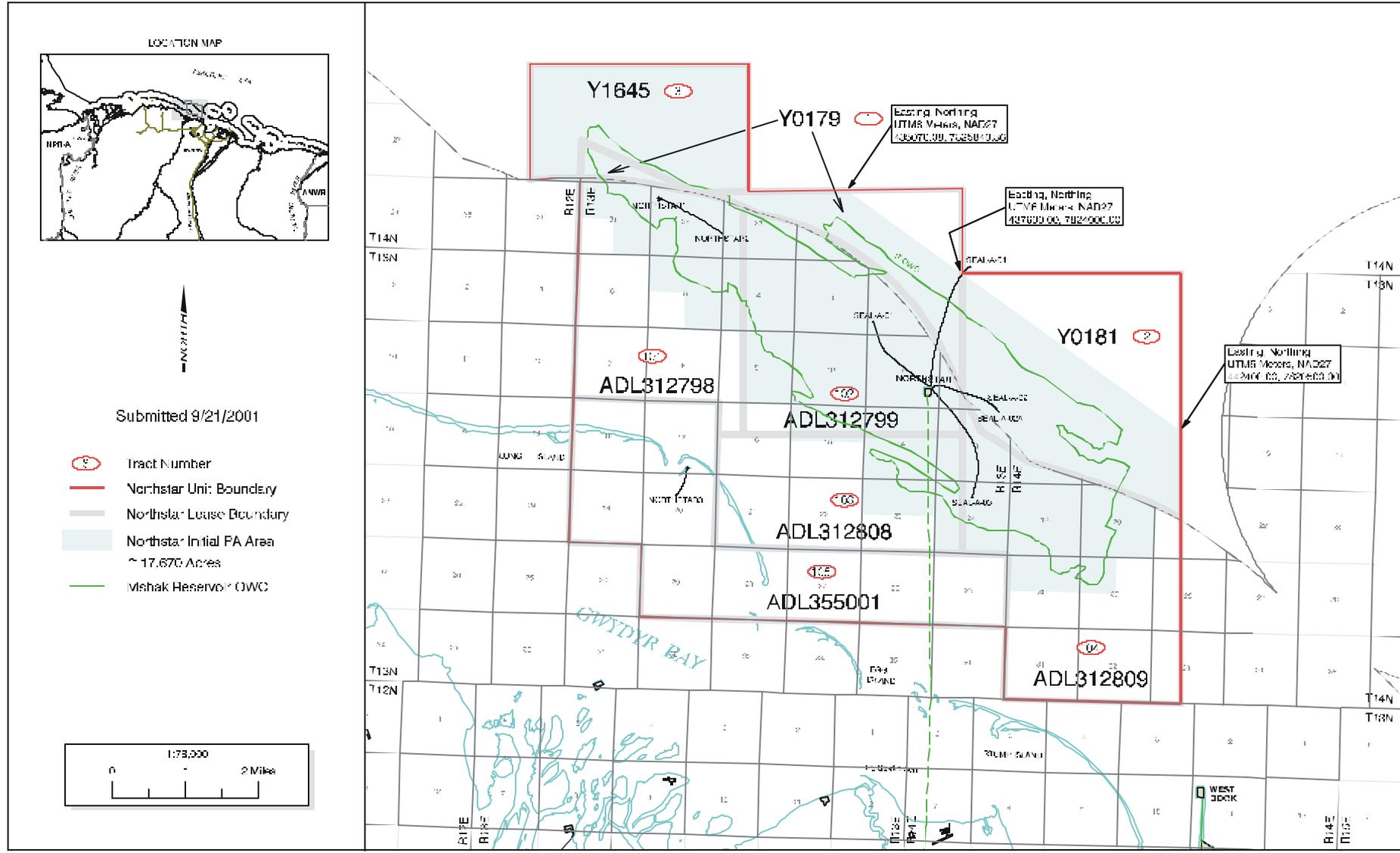
Unit Tract No.	Lease No.	Sale Tract No. and Legal Description	Acreage	Royalty	Net Profit Share	ORRI (%)	BP %	Murphy %
TR-1	OCS-Y-0179	That area of block 470 lying east of the line marking the western boundary of parcel "1" and between the two lines bisecting block 470, identified as parcel "1", containing approximately 94.30 hectares, and parcel "2", containing approximately 15.27 hectares, as shown on the Supplemental Official OCS Block Diagram, dated 10/4/79, based on Official Protraction Diagram NR 6-3, Beechey Point, approved April 29, 1975; and that area lying between the two lines bisecting block 471, containing approximately 611.95 hectares, as shown on the Supplemental Official OCS Block Diagram, dated 10/4/79, based on Official Protraction Diagram NR 6-3, Beechey Point, approved April 29, 1975; and that area lying northeasterly of the line bisecting block 515, containing approximately 189.83 hectares, as shown on the Supplemental Official OCS Block Diagram, dated 10/4/79, based on Official Protraction Diagram NR 6-3, Beechey Point, approved April 29, 1975. (911.35 hectares)	2,251.99	Fixed Sliding Scale (minimum of 16.66667%)	None	None	100.00	0.00
TR-2	OCS-Y-0181	That area lying northeasterly of the line bisecting block 516, containing approximately 2076.98 hectares, as shown on the Supplemental Official OCS Block Diagram, dated 10/4/79, based on Official Protraction Diagram NR 6-3, Beechey Point, approved April 29, 1975; and that area lying northeasterly of the line bisecting block 560, located in the northeast corner of block 560, containing approximately 44.65 hectares, as shown on the Supplemental Official OCS Block Diagram, revised and dated 12/9/79, based on Official Protraction Diagram NR 6-3, Beechey Point, approved April 29, 1975. (2121.63 hectares)	5,242.65	Fixed Sliding Scale (minimum of 16.66667%)	None	None	90.00	10.00
TR-3	OCS-Y-1645	That portion of Block 6510, OCS Official Protraction Diagram NR06-3, Beechey Point, approved February 01, 1996, shown as Federal 8(g) Area C on OCS Composite Block Diagram dated April 24, 1996. (1,185.584351 hectares)	2,929.64	12.50%	None	None	100.00	0.00
		SUBTOTAL OF FEDERAL ACREAGE	10,424.28					
		TOTAL UNIT ACREAGE	33,767.77					

BP BP Exploration (Alaska) Inc.
Murphy Murphy Exploration (Alaska), Inc.



NORTHSTAR UNIT AND INITIAL PARTICIPATING AREA

Northstar Unit Exhibit B and D



**EXHIBIT C
NORTHSTAR UNIT AGREEMENT
NORTHSTAR PARTICIPATING AREA* INITIAL UNIT TRACT PARTICIPATIONS
FOR ALLOCATION OF UNITIZED SUBSTANCES**

Unit Tract No.	Lease No.	Sale Tract No. and Legal Description of that portion of Unit Tract within Participating Area**	Acreege of Unit Tract	Acreege In Participating Area***	Royalty	Tract Participation (%)	BP %	Murphy %
TR-101	ADL 312798	That portion of ADL 312798 lying within protracted <u>T14N R13E, Umiat Meridian, Alaska</u> Section 30 Section 31: N 1/2 and SE 1/4 Sections 32 and 33 <u>T13N R13E, Umiat Meridian, Alaska</u> Section 4 Section 5: N 1/2 and SE 1/4 As shown on Exhibit D.	4,392.82	1,885.00	20% + Supplemental Royalty	1.512	100.00	0.00
TR-102	ADL 312799	That portion of ADL 312799 lying within protracted <u>T14N R13E, Umiat Meridian, Alaska</u> Sections 33 and 34 <u>T13N R13E, Umiat Meridian, Alaska</u> Sections 2, 3, 4, 9, 10, 11, 12, 13, 14 and 15 As shown on Exhibit D.	4,472.37	4,292.00	20% + Supplemental Royalty	76.598	100.00	0.00
TR-103	ADL 312808	That portion of ADL 312808 lying within protracted <u>T13N R13E, Umiat Meridian, Alaska</u> Sections 13 and 14 Section 15: N 1/2 Section 23: N 1/2 Section 24 As shown on Exhibit D.	3,432.92	1,154.00	20% + Supplemental Royalty	1.064	100.00	0.00
TR-104	ADL 312809	That portion of ADL 312909 lying within protracted <u>T13N R13E, Umiat Meridian, Alaska</u> Sections 13 and 24 <u>T13N R14E, Umiat Meridian, Alaska</u> Sections 17, 18, 19 and 20 Section 29: NW 1/4 Section 30: N 1/2 As shown on Exhibit D.	5,301.38	2,570.00	20% + Supplemental Royalty	4.923	100.00	0.00
		SUBTOTAL OF STATE ACREAGE		9,901.00		84.097		

**EXHIBIT C
NORTHSTAR UNIT AGREEMENT
NORTHSTAR PARTICIPATING AREA* INITIAL UNIT TRACT PARTICIPATIONS
FOR ALLOCATION OF UNITIZED SUBSTANCES**

Unit Tract No.	Lease No.	Sale Tract No. and Legal Description of that portion of Unit Tract within Participating Area**	Acreege of Unit Tract	Acreege In Participating Area***	Royalty	Tract Participation (%)	BP %	Murphy %
TR-1	OCS-Y-0179	That portion of OCS-Y-0179 lying south of the line commencing at Easting, Northing UTM6 Meters, NAD27 435076.08, 7825840.36 and ending at Easting, Northing UTM6 Meters, NAD27 437600.00, 7824000.00, as shown on Exhibit D (dated 9/21/01).	2,251.99	1,669.00	Fixed Sliding Scale (minimum of 16.66667%)	4.085	100.00	0.00
TR-2	OCS-Y-0181	That portion of OCS-Y-0181 lying south of the line commencing at Easting, Northing UTM6 Meters, NAD27 437600.00, 7824000.00 and ending at Easting, Northing UTM6 Meters, NAD27 442400.00, 7820500.00, as shown on Exhibit D (dated 9/21/01).	5,242.65	3,167.00	Fixed Sliding Scale (minimum of 16.66667%)	11.728	90.00	10.00
TR-3	OCS-Y-1645	All of OCS-Y-1645	2,929.64	2,930.00	12.50%	0.090	100.00	0.00
		SUBTOTAL OF FEDERAL ACREAGE		7,766.00		15.903		
		TOTAL PARTICIPATING AREA ACREAGE		17,667.00		100.000		

* The Northstar Reservoir is defined as the accumulation of hydrocarbons in the Ivishak and Shublik "D" formations common to and correlating with the interval between 12,630 measured depth below rotary kelly bushing ("MDrkb") and 13,044 feet MDrkb in the Seal A-1 well.

** See Exhibit A for the legal description of each lease. The leases are described in terms of OCS blocks existing at the time of the relevant lease sale. The OCS blocks have since been renumbered.

*** The acreage of each tract in the Participating Area is derived from GIS polygonal area measurement in BP's cartography system rounded to the nearest acre, and is not equivalent to surveyed acreage.

BP BP Exploration (Alaska) Inc.
Murphy Murphy Exploration (Alaska), Inc.

Exhibit C-1
Procedure for Redetermination of
Northstar Participating Area Unit Tract Participations
(October 5, 2001)

The Unit Tract Participations set out in Exhibit C for the Northstar Participating Area shall be revised in accordance with the provisions of this Exhibit C-1 at the first and fourth anniversaries of the commencement of Sustained Unit Production from the Northstar Participating Area (“Northstar Production”), and as otherwise provided herein.

1.0 Interim Unit Tract Participations

1.1 Proposal by Unit Operator. Within two months following the first anniversary of Northstar Production, the Unit Operator shall prepare and submit to the Regional Supervisor and the Commissioner any proposed revisions to the Initial Unit Tract Participations (the “Proposed Interim Unit Tract Participations”) based upon analysis of the data available through the first year of production. The data and analysis submitted in support of the Proposed Interim Unit Tract Allocations shall be consistent with Section 4 below. The Working Interest Owners shall agree on the Proposed Interim Unit Tract Participations before the Unit Operator submits them to the Minerals Management Service, U.S. Department of the Interior (“MMS”) and the State of Alaska, Department of Natural Resources (“DNR”) for approval.

1.2 Review and Approval of Proposed Interim Unit Tract Participations. The Interim Unit Tract Participations for the Northstar Participating Area require approval by the Regional Supervisor and the Commissioner.

1.2.1 Within ten days after receipt of the Proposed Interim Unit Tract Participations and supporting data and analysis, MMS and DNR shall give the Unit Operator written notice as to whether the submission is complete. If MMS and DNR determine the submission to be incomplete, MMS and DNR shall provide the Unit Operator with a written notice of incompleteness, specifying the deficiencies in the submission. The Unit Operator shall submit additional data and analysis until MMS and DNR determine the submission to be complete.

1.2.2 MMS, DNR and the Alaska Oil and Gas Conservation Commission (“AOGCC”) have agreed to form a Northstar Reservoir Modeling Team (the “Joint Team”). Within four months after the first anniversary of Northstar Production, the Joint Team shall recommend approval or rejection of the Proposed Interim Unit Tract Participations by the Regional Supervisor and the Commissioner and, if the Joint Team recommends rejection, it shall propose its own Interim Unit Tract Participations (the “Joint Team Interim Unit Tract Participations”). The Regional Supervisor and the Commissioner shall inform the Unit Operator of the Joint Team’s recommendation, and provide the Unit Operator with the Joint Team

Interim Unit Tract Participations, if any. If the Joint Team recommends rejection of the Proposed Interim Unit Tract Participations, the Unit Operator shall submit written comments or objections concerning the Joint Team Interim Unit Tract Participations to the Regional Supervisor and the Commissioner within five months of the first anniversary of Northstar Production.

1.2.3 Within six months after the first anniversary of Northstar Production, the Regional Supervisor and the Commissioner shall approve the Proposed Interim Unit Tract Participations, the Joint Team Interim Unit Tract Participations or alternative Interim Unit Tract Participations.

1.3 Agency Decision. MMS and DNR shall make their best efforts to reach consensus and approve identical Interim Unit Tract Participations within six months following the first anniversary of Northstar Production. In the event that the Regional Supervisor and the Commissioner do not approve identical Interim Unit Tract Participations within six months following the first anniversary of Northstar Production, the Proposed Interim Unit Tract Participations shall be deemed to have been approved, and shall be effective with respect to all parties on a prospective basis commencing the first day of the seventh month following the first anniversary of Northstar Production.

1.4 Effective Date. If both the Regional Supervisor and the Commissioner approve identical Interim Unit Tract Participations, the Interim Unit Tract Participations shall be effective with respect to all parties on a prospective basis commencing the first day of the month following approval by the Regional Supervisor and the Commissioner.

2.0 Final Unit Tract Participations

2.1 Proposal by Unit Operator. Within two months following the fourth anniversary of Northstar Production, the Unit Operator shall prepare and submit to the Regional Supervisor and the Commissioner any proposed revisions to the Interim Unit Tract Participations (the ‘Proposed Final Unit Tract Participations’) based upon analysis of the data available through the first four years of production. The data and analysis submitted in support of the Proposed Final Unit Tract Allocations shall be consistent with Section 4 below. The Working Interest Owners shall agree on the Proposed Final Unit Tract Participations before the Unit Operator submits them to MMS and DNR for approval.

2.2 Review and Approval of Final Unit Tract Participations. The Final Unit Tract Participations for the Northstar Participating Area require approval or deemed approval pursuant to Section 2.3 by the Regional Supervisor and the Commissioner before they become effective.

2.2.1 Within ten days after receipt of the Proposed Final Unit Tract Participations and supporting data and analysis, MMS and DNR shall give the Unit Operator written notice as to whether the submission is complete. If MMS and DNR determine the submission to be incomplete, MMS and DNR shall provide the Unit Operator with a written notice of incompleteness, specifying the deficiencies in the submission. The Unit Operator shall submit additional data and analysis until MMS and DNR determine the submission to be complete.

2.2.2 Within four months after the fourth anniversary of Northstar Production, the Joint Team shall recommend approval or rejection of the Proposed Final Unit Tract Participations by the Regional Supervisor and Commissioner and, if the Joint Team recommends rejection, it shall propose its own Final Unit Tract Participations (the ‘Joint Team Final Unit Tract Participations’). The Regional Supervisor and the Commissioner shall inform the Unit Operator of the Joint Team’s recommendation, and provide the Unit Operator with the Joint Team Final Unit Tract Participations, if any. If the Joint Team recommends rejection of the Proposed Final Unit Tract Participations, the Unit Operator shall submit written comments or objections concerning the Joint Team Final Unit Tract Participations to the Regional Supervisor and the Commissioner within five months of the fourth anniversary of Northstar Production.

2.2.3 Within six months after the fourth anniversary of Northstar Production, the Regional Supervisor and the Commissioner shall approve the Proposed Final Unit Tract Participations, the Joint Team Final Unit Tract Participations or alternative Final Unit Tract Participations.

2.3 Agency Decision. MMS and DNR shall make their best efforts to reach consensus and approve identical Final Unit Tract Participations within six months following the fourth anniversary of Northstar Production. In the event the Regional Supervisor and the Commissioner do not approve identical Final Unit Tract Participations, then the Final Unit Tract Participation for each Unit Tract shall be deemed to be a weighted average of the Final Unit Tract Participation approved by the Regional Supervisor and the Final Unit Tract Participation approved by the Commissioner (“Averaged Final Unit Tract Participations”). The Averaged Final Unit Tract Participations shall be equal to:

$$(MMS \times .15903) + (DNR \times .84097)$$

where:

MMS = the Final Unit Tract Participation approved by the Regional Supervisor; and

DNR = the Final Unit Tract Participation approved by the Commissioner.

MMS, DNR, and the Working Interest Owners shall be deemed to have approved the Averaged Final Unit Tract Participations, and the Working Interest Owners agree to be bound by the Averaged Final Unit Tract Participations. The Working Interest Owners shall not appeal the use of the averaging methodology hereunder, nor shall they appeal the Final Unit Tract Participations approved by the Regional Supervisor or by the Commissioner unless such decision is alleged to be arbitrary and capricious or alleged to violate constitutionally protected rights of the Working Interest Owners.

A sample calculation is attached as Exhibit C-2.

3.0 Final Unit Tract Participation Adjustments

3.1 Retroactive Adjustment Threshold. On the first day of the month following the approval or deemed approval of the Final Unit Tract Participations, such tract participations shall be applied retroactively to the first day of the commencement of Northstar Production if:

- (a) the sum of the Interim Unit Tract Participations for State leases is greater than 85.097 % or less than 83.097 % or
- (b) the sum of the Final Unit Tract Participations for State leases is greater than 85.097% or less than 83.097%.

Otherwise, Final Unit Tract Participations shall be effective with respect to all parties on a prospective basis commencing the first day of the month following approval or deemed approval by the Regional Supervisor and the Commissioner.

3.2 Equalization Procedure.

3.2.1 State Equalization Procedure. If the Unit Tract Participations must be applied retroactively pursuant to Subsection 3.1 above, then determination of the equalization amounts shall be calculated retroactively, but applied prospectively and spread evenly over one year of production of Unitized Substances from the Northstar Participating Area. Debits and credits owed to or by the State pursuant to Subsection 3.1 shall be made and calculated in the same manner as is required for payment for the royalty interests of the State in the Unitized Substances being produced from the Northstar Participating Area.

3.2.2 Federal Equalization Procedure. If the Unit Tract Participations must be applied retroactively pursuant to Subsection 3.1 above, then equalization of production volumes for MMS shall be in accordance with the Federal Royalty Simplification and Fairness Act, the Federal Oil and Gas Royalty Management Act, and all other applicable federal statutes and regulations.

3.2.3 Owner Equalization Procedure. If Final Unit Tract Participations must be applied retroactively pursuant to Subsection 3.1 above, then equalization of production volumes as between the Working Interest Owners shall be calculated retroactively but applied prospectively and spread evenly over one year of production of Unitized Substances from the Northstar Participating Area.

4.0 Availability of Data and Technical Information

4.1 Availability of Technical Information. The Unit Operator shall supply all appropriate supporting information to allow MMS and DNR to evaluate proposed Unit Tract Participations. MMS and DNR consider the information that the Unit Operator submitted to support the Proposed Initial Unit Tract Participations as the minimum type and amount of data that will be required to support subsequent Unit Tract Participations. The Unit Operator shall base subsequently proposed Unit Tract Participations on significantly more information and submit more data and interpretations than were available for the Proposed Initial Unit Tract Participations. Nothing in this section shall limit the rights of MMS and DNR under applicable statutes, regulations, leases and agreements, including Article 3.9 of the Northstar Unit Agreement, to request that the Unit Operator provide whatever data and interpretations the agencies deem necessary to fulfill their respective responsibilities.

4.2 Access to Production Simulation Model. For a period of six months following the first and fourth anniversaries of Northstar Production, the Unit Operator shall provide the Commissioner access to the Unit Operator's production simulation model(s). The Commissioner shall be permitted to produce a production simulation model(s) with alternative factors, data or weighting of factors. For both the Interim and Final Redeterminations, the Unit Operator shall provide the Commissioner with up to twenty (20) hours of assistance by a qualified technical operator who shall operate the computer software and hardware necessary to access the existing model(s) at no cost to the State. Assistance in excess of twenty (20) hours shall be paid for by the State at a rate of two hundred dollars (\$200) per hour or portion thereof.

The Unit Operator shall not be required to provide more than eighty (80) hours of assistance by a qualified technical operator for the Commissioner to evaluate the Proposed Interim Unit Tract Participations. The Commissioner shall have access to the Unit Operator's model for up to sixty days (consecutive or non-consecutive) to evaluate the Proposed Final Unit Tract Participations. The Unit Operator shall provide the Commissioner with reasonable amounts of assistance by a qualified technical operator to evaluate any subsequently proposed Unit Tract Participations, and in any event all such assistance shall be provided within a sixty (60) day period from the date such assistance first commences.

5.0 Extension of Final Redetermination Deadline In Event Of Continued Drilling.

The parties contemplate that on the fourth anniversary of Northstar Production, eight months of production shall have elapsed from the date the Unit Operator completed, suspended, or plugged and abandoned the last production well to be drilled into the Northstar Reservoir pursuant to the approved Plan of Development in effect at that time, it being recognized that the Fourth Plan of Development for the Northstar Unit provides for sixteen production wells in the Northstar Reservoir. If, on the fourth anniversary of Northstar Production, the Unit Operator has so completed the last such production well, but less than eight months of production has elapsed from the date such work was finished, then the deadline for Unit Operator to submit Proposed Final Unit Tract Participations shall be automatically extended until the expiration of the eight month period running therefrom. If, on the fourth anniversary of Northstar Production the Unit Operator has not completed, suspended, or plugged and abandoned the last such production well, DNR and MMS may extend the deadline for the Unit Operator to submit Proposed Final Unit Tract Participations.

6.0 Redetermination In Event Of Material Change To Plan Of Development.

6.1 Joint MMS and DNR Request For Subsequent Redetermination. In the event the Regional Supervisor and Commissioner both make a written finding that there has been a material change to the Plan of Development, which justifies redetermination of the Final Unit Tract Participations, they shall each issue a written request for a subsequent redetermination (“Redetermination Request”) to the Unit Operator.

6.2 Proposal by Unit Operator. Within two months following the date of the Redetermination Request, the Unit Operator shall prepare and submit to the Regional Supervisor and the Commissioner any proposed revisions to the Final Unit Tract Participations (the “Proposed Revised Unit Tract Participations”) based upon the data and analysis available at that time. The data and analysis submitted in support of the Proposed Revised Unit Tract Participations shall be consistent with Section 4 above. The Working Interest Owners shall agree on the Proposed Revised Unit Tract Participations before the Unit Operator submits them to MMS and DNR for approval.

6.3 Review and Approval of Revised Unit Tract Participations. The Revised Unit Tract Participations for the Northstar Participating Areas require approval or deemed approval pursuant to Section 6.4 by the Regional Supervisor and the Commissioner before they become effective.

6.3.1 Within ten days after receipt of the Proposed Revised Unit Tract Participations and supporting data and analysis, MMS and DNR shall give the Unit Operator written notice as to whether the submission is complete. If MMS and DNR determine the submission to be incomplete, MMS and DNR shall provide the Unit Operator with a written notice of

incompleteness, specifying the deficiencies in the submission. The Unit Operator shall submit additional data and analysis until MMS and DNR determine the submission to be complete.

6.3.2 Within four months after the date of the Redetermination Request, the Joint Team shall recommend approval or rejection of the Proposed Revised Unit Tract Participations by the Regional Supervisor and Commissioner and, if the Joint Team recommends rejection, it shall propose its own Revised Unit Tract Participations (the “Joint Team Revised Unit Tract Participations”). The Regional Supervisor and the Commissioner shall inform the Unit Operator of the Joint Team’s recommendation, and provide the Unit Operator with the Joint Team Revised Unit Tract Participations, if any. If the Joint Team recommends rejection of the Proposed Revised Unit Tract Participations, the Unit Operator shall submit written comments or objections concerning the Joint Team Revised Unit Tract Participations to the Regional Supervisor and the Commissioner within five months after the date of the Redetermination Request.

6.3.3 Within six months after the date of the Redetermination Request, the Regional Supervisor and the Commissioner shall approve the Proposed Revised Unit Tract Participations, the Joint Team Revised Unit Tract Participations, or alternative Revised Unit Tract Participations.

6.4 Agency Decision. MMS and DNR shall make their best efforts to reach consensus and approve identical Revised Unit Tract Participations within six months following the date of the Redetermination Request. In the event the Regional Supervisor and the Commissioner do not approve identical Revised Unit Tract Participations, then the Revised Unit Tract Participation for each Unit Tract shall be deemed to be a weighted average of the Revised Unit Tract Participations approved by the Regional Supervisor and the Revised Unit Tract Participations approved by the Commissioner (“Averaged Revised Unit Tract Participations”). The Averaged Revised Unit Tract Participations shall be equal to:

$$(MMS \times CF) + (DNR \times CS)$$

where:

MMS = the Revised Unit Tract Participation approved by the Regional Supervisor;

CF = the sum of the current Unit Tract Participations for Federal leases prior to the revision;

DNR = the Revised Unit Tract Participation approved by the Commissioner; and

CS = the sum of the current Unit Tract Participations for State leases prior to the revision.

MMS, DNR, and the Working Interest Owners shall be deemed to have approved the Averaged Revised Unit Tract Participations, and the Working Interest Owners agree to be bound by the Averaged Revised Unit Tract Participations. The Working Interest Owners shall not appeal the use of the averaging methodology hereunder, nor shall they appeal the Final Unit Tract Participations approved by the Regional Supervisor or by the Commissioner unless such decision is alleged to be arbitrary and capricious or alleged to violate constitutionally protected rights of the Working Interest Owners.

6.5 Effective Date. The Revised Unit Tract Participations shall be effective with respect to all parties on a prospective basis commencing the first day of the month following approval or deemed approval by the Regional Supervisor and the Commissioner. Revised Unit Tract Participations shall be applied retroactively only if the Regional Supervisor and Commissioner so agree.

7.0 Redetermination In Event of Expansion Or Contraction Of Participating Area.

7.1 Unit Agreement Governs. The Northstar Unit Agreement (including Exhibits), statutes and regulations shall govern determination of Unit Tract Participations if the Northstar Participating Area is expanded or contracted.

7.2 Proposal by Unit Operator. Within six months after the Unit Operator obtains the knowledge or information on which the expansion or contraction is predicated, the Unit Operator shall propose expansion or contraction of the Northstar PA, and submit to the Regional Supervisor and the Commissioner proposed revisions to the Unit Tract Participations (the Proposed Unit Tract Participations”) based upon analysis of the data available at that time. The data and analysis submitted in support of the Proposed Unit Tract Participations shall be consistent with Section 4 above. The Working Interest Owners shall agree on the Proposed Unit Tract Participations before the Unit Operator submits them to MMS and DNR for approval.

7.3 Review and Approval of Revised Unit Tract Participations. Upon expansion or contraction of the Northstar Participating Area, the Unit Tract Participations for the Northstar Participating Area require approval or deemed approval pursuant to Section 7.3.3 by the Regional Supervisor and the Commissioner before they become effective.

7.3.1 Within ten days after receipt of the Proposed Unit Tract Participations and supporting data and analysis, MMS and DNR shall give the Unit Operator written notice as to whether the submission is complete. If MMS and DNR determine the submission to be incomplete, MMS and DNR shall provide the Unit Operator with a written notice of incompleteness, specifying the deficiencies in the submission. The Unit Operator shall

submit additional data and analysis until MMS and DNR determine the submission to be complete.

7.3.2 Within four months following the proposed expansion or contraction, the Joint Team shall recommend approval or rejection of the Proposed Unit Tract Participations by the Regional Supervisor and Commissioner and, if the Joint Team recommends rejection, it shall propose its own Unit Tract Participations (the “Joint Team Unit Tract Participations”). The Regional Supervisor and the Commissioner shall inform the Unit Operator of the Joint Team’s recommendation, and provide the Joint Team Unit Tract Participations, if any. If the Joint Team recommends rejection of the Proposed Unit Tract Participations, the Unit Operator shall submit written comments or objections concerning the Joint Team Unit Tract Participations to the Regional Supervisor and the Commissioner within five months after the proposed expansion or contraction.

7.3.3 Within six months following the proposed expansion or contraction, the Regional Supervisor and the Commissioner shall approve the Proposed Unit Tract Participations, the Joint Team Unit Tract Participations, or alternative Unit Tract Participations for the Northstar Participating Area. MMS and DNR shall make their best efforts to reach consensus and approve identical Unit Tract Participations for the expanded or contracted Northstar Participating Area. In the event the Regional Supervisor and the Commissioner do not approve identical Unit Tract Participations, then the Unit Tract Participation for each Unit Tract shall be deemed to be a weighted average of the Unit Tract Participations approved by the Regional Supervisor and the Unit Tract Participations approved by the Commissioner (“Averaged Unit Tract Participations”). The Averaged Unit Tract Participations shall be equal to:

$$(MMS \times CF) + (DNR \times CS)$$

where:

MMS = Unit Tract Participation approved by the Regional Supervisor;

CF = the sum of the current Unit Tract Participations for Federal leases prior to the revision;

DNR = Unit Tract Participation approved by the Commissioner; and

CS = the sum of the current Unit Tract Participations for State leases prior to the revision.

MMS, DNR and the Working Interest Owners shall be deemed to have approved the Averaged Unit Tract Participations, and the Working Interest Owners agree to be bound by the Averaged Unit Tract Participations. The

Working Interest Owners shall not appeal the use of the averaging methodology hereunder, nor shall they appeal the Final Unit Tract Participations approved by the Regional Supervisor or by the Commissioner unless such decision is alleged to be arbitrary and capricious or alleged to violate constitutionally protected rights of the Working Interest Owners.

- 7.4 Effective Date. Unit Tract Participations for the expanded or contracted Participating Area shall be effective with respect to all parties on a prospective basis commencing the first day of the month following approval or deemed approval by the Regional Supervisor and the Commissioner. Unit Tract Participations for the expanded or contracted Participating Area shall be applied retroactively only if both the Regional Supervisor and the Commissioner so agree.

8.0 Sum Of Proposed Tract Participations

The sum of the Unit Tract Participations proposed by the Regional Supervisor under this Exhibit C-1 shall equal one hundred percent (100%). The sum of the Unit Tract Participations proposed by the Commissioner under this Exhibit C-1 shall equal one hundred percent (100%).

**EXHIBIT C-2
SAMPLE CALCULATION UNDER
PROCEDURE FOR DETERMINATION OF
NORTHSTAR PARTICIPATING AREA UNIT TRACT PARTICIPATIONS**

**NORTHSTAR UNIT AGREEMENT
NORTHSTAR PARTICIPATING AREA**

Tract	Initial Tract Participations (%)	MMS Proposal (%)	DNR Proposal (%)	Weighted Average of MMS & DNR Proposals (%)*
101	1.512	1.512	2.512	2.353
102	76.598	75.398	79.986	79.256
103	1.064	1.020	1.579	1.490
104	4.923	4.897	5.923	5.760
Subtotal (State)	84.097	82.827	90.000	88.859
1	4.085	5.231	2.223	2.701
2	11.728	11.728	7.747	8.380
3	0.090	0.214	0.030	0.059
Subtotal (Federal)	15.903	17.173	10.000	11.141
Total	100.000	100.000	100.000	100.000

* Weighted Average = (MMS Proposal X .15903) + (DNR Proposal X .84097)

Unit Tract Participation percentages are rounded to thousandths.

EXHIBIT E
NORTHSTAR UNIT - NORTHSTAR PARTICIPATING AREA
ALLOCATION OF PARTICIPATING AREA EXPENSE

Unit Tract No.	Lease No.	Lease Ownership		Unit Tract Participation (%)	Allocation by Owner	
		BP %	Murphy %		BP %	Murphy %
TR-101	ADL 312798	100.00	0.00	1.512	1.51200	-
TR-102	ADL 312799	100.00	0.00	76.598	76.59800	-
TR-103	ADL 312808	100.00	0.00	1.064	1.06400	-
TR-104	ADL 312809	100.00	0.00	4.923	4.92300	-
TR-1	OCS-Y-0179	100.00	0.00	4.085	4.08500	-
TR-2	OCS-Y-0181	90.00	10.00	11.728	10.55520	1.17280
TR-3	OCS-Y-1645	100.00	0.00	0.090	0.09000	-
	Total			100.000	98.82720	1.17280

BP BP Exploration (Alaska) Inc.
Murphy Murphy Exploration (Alaska), Inc.

**NORTHSTAR UNIT
FOURTH PLAN OF DEVELOPMENT
(October 1, 2001 – September 30, 2004)**

BP Exploration (Alaska) Inc. (“BP”), Unit Operator of the Northstar Unit, submits this Fourth Plan of Development (“POD”) on behalf of BP and Murphy Exploration (Alaska), Inc., the Northstar Unit Working Interest Owners.

This Plan is submitted to the Commissioner of the Department of Natural Resources, State of Alaska (“DNR”) and the Regional Supervisor, U.S. Minerals Management Service (“MMS”) in accordance with Article 8 of the Northstar Unit Agreement and 11 AAC 83.343. It describes proposed development and operations activities based on data reasonably available at the time of submission.

Overview

The Amended Third POD was submitted May 5, 1999, and was approved by DNR on May 11, 1999, which extended the period of the original third POD through April 1, 2002. This Fourth POD will supersede the Amended Third POD when approved by DNR.

Status of Activities Under Amended Third POD

The Amended Third POD sets out a schedule of activities culminating in the production of oil in 4Q 2001. The status of these activities is listed below.

Activity	Anticipated Date
(1) Engineering, Procurement and Fabrication	
Complete island slope protection block fabrication	Complete
Complete island procurement	Complete
Complete detail infrastructure engineering	Complete
Complete detail process facility engineering	Complete
Complete pipeline tie-in skid engineering	Complete
Complete infrastructure procurement	Complete
Complete infrastructure fabrication in Anchorage	Complete
Complete pipeline procurement	Complete
Complete process facility procurement	Complete
Complete process facility fabrication in Anchorage	Complete
Complete construction support and start up support engineering	4Q/01
Start-up	4Q/01

(2) EIS and Permitting Activities

Complete EIS activities	Complete
Complete permitting activities	Complete

(3) Form a Participating Area

Transfer data to DNR, MMS, and AOGCC; discuss seismic data and container	Ongoing
Complete Participating Area review with working interest owners	Complete
Complete agency discussions on model descriptions and inputs	Ongoing
Establish container, OOIP and depletion plan (working interest owners, MMS, DNR)	Ongoing
Complete review of reservoir development plan with agencies, reach final agreement for participating area	4Q/01

(4) Island Construction and Pipeline Installation

Build ice roads for '00 construction season	Complete
Complete island construction	Complete
Build ice roads for '01 construction season	Complete
Complete pipeline installation	Complete

(5) Transport and Installation

Complete sealift of infrastructure	Complete
Complete installation of infrastructure	Complete
Complete sealift of process facility	Complete
Complete installation of process facility	4Q/01

(6) Rig Modification and Mobilization

Complete rig modification	Complete
Complete mobilization of rig	Complete
Begin production drilling	Complete

Fourth Plan of Development

The Fourth POD covers the period commencing with startup of sustained production from the Northstar Reservoir in the Northstar Participating Area through September 30, 2004. Sustained production is expected to occur in mid-October of 2001.

Well Operations and Reservoir Development

At the commencement of sustained production from the Northstar Reservoir, the Unit Operator will have drilled approximately 3 production wells, 1 gas injection well, and 1 waste disposal well. Unit Operator will continue to drill and complete a total of up to 16 production wells and 5 gas injection wells as needed to maximize recovery from the Northstar Reservoir. The Northstar production facilities, located on Seal Island, contain space for as many as 36 wells. Production is expected to peak at about 65,000 barrels per day. Field life is estimated at 15 years.

Facilities

At the commencement of sustained production from the Northstar Reservoir, the installation of major facilities will be essentially complete. No major additions are anticipated; however, work to complete commissioning of plant and post-commissioning adjustments to facilities is envisaged.

Operations Logistics

Although the primary means of transport will be by barge and helicopter to Seal Island, the Unit Operator anticipates making an application to construct an ice road to the island during the winter of 2001/2002 in order to facilitate logistics to and from the island.

Production will be transported from Seal Island to TAPS Pump Station 1 via the Northstar Oil Pipeline, a common carrier pipeline.

Injection of Outside Substances

A 16.3 mile long gas pipeline from the Central Compressor Plant in the Prudhoe Bay field will be used to transport dry gas to Seal Island. This gas will be injected into the Northstar Reservoir to enhance oil recovery and to provide fuel gas prior to start-up. Depending upon reservoir performance and the volumes of produced gas available for reinjection, up to 400 bcf of Outside Substance gas may be injected into the Northstar Reservoir over the life of the field at a peak rate of approximately 100 mmscf/day.

Further Exploration within Unit

During the term of the Fourth POD, Unit Operator will continue to explore and appraise other acreage and formations within the Northstar Unit as described in Confidential Attachment 1.

The timing of any exploratory drilling will be dependent upon and subject to the development drilling schedule and plant capacity. Unit Operator will apply for appropriate approvals for such exploration, appraisal and possible development.

The Working Interest Owners agree that on the fourth anniversary of the commencement of Sustained Production from the Northstar Participating Area: (a) the Owners shall have commenced drilling a well which tests State acreage lying at least one-half mile outside of the boundary of the Northstar Participating Area; or (b) the Unit boundaries shall automatically contract, subject to approval by DNR and MMS, so as to exclude any State lease of which no part lies within an approved participating area.

Unit Operator will continue to provide MMS and DNR an annual summary of Northstar Unit activities throughout the term of this Fourth POD and inform MMS and DNR when material changes occur.

OUTSIDE SUBSTANCES AGREEMENT

NORTHSTAR UNIT NORTHSTAR PARTICIPATING AREA

(October 5, 2001)

Pursuant to Section 10.3 of the Northstar Unit Agreement, the Regional Supervisor, the Commissioner and the Northstar Unit Working Interest Owners hereby agree upon the rate at which Outside Substances consisting of dry gas injected into the Northstar Participating Area ("Injected Outside Substances") will be deemed recovered.

After injection of Outside Substances commences, Injected Outside Substances shall be deemed recovered at a rate equal to eighty percent (80%) of the dry gas Unitized Substances produced from the Northstar Participating Area and sold or used for purposes other than Unit Operations ("Injected Outside Substances Deemed Recovered"). Dry gas Unitized Substances used for fuel gas and other Unit Operations at the Northstar Unit shall not be Injected Outside Substances Deemed Recovered.

All provisions for royalty-free Injected Outside Substances shall terminate when the total British Thermal Units ("BTUs") in the Injected Outside Substances Deemed Recovered equal ninety percent (90%) of the total BTUs in the Injected Outside Substances. BTUs for Injected Outside Substances will be based on assays of the gas as injected, whereas BTUs for Injected Outside Substances Deemed Recovered will be based on assays of the sales gas stream (consisting of commingled Outside Substances and original reservoir gas). The Unit Operator shall use the same standards to measure the BTUs in both the Injected Outside Substances and the Injected Outside Substances Deemed Recovered.

As long as royalty has already been paid once, no royalty shall be due or payable on Injected Outside Substances Deemed Recovered. Only dry gas and not products extracted therefrom, may be saved, removed or sold royalty-free.

The Unit Operator shall maintain records and provide the Regional Supervisor and the Commissioner with Operator Reports, supplemental Outside Substances Reports, and Gas Disposition and Reserves Debit Reports on a monthly basis. It is anticipated that BP and DNR will amend the Electronic Commerce Agreement ("ECA") to address submittal of this information, and until such amendment, BP may to the extent it is possible and practical, submit the information to DNR pursuant to the protocols and procedures set out in the ECA. The Operator Report shall describe the total volume of hydrocarbons produced from the Northstar PA. The Outside Substances Report shall contain the monthly volumes and BTU equivalents of Injected Outside Substances, Injected Outside Substances Deemed Recovered, and the balance of Injected Outside Substances remaining. The monthly Gas Disposition and Reserves Debit Reports shall detail the volumes of gas imported and produced, the disposition of the gas, and the allocation to each Working Interest Owner. In addition, each Working Interest Owner's monthly Royalty Reports submitted to DNR and/or MMS, as appropriate, shall indicate the total volume of dry gas Unitized Substances produced, the volume of Injected Outside Substances Deemed Recovered, and the volume of Injected Outside Substances for which royalty is due and payable.