

NM2 - ____1____

CLOSURE



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington District Office
6251 College Blvd., Suite A
Farmington, New Mexico 87402
www.blm.gov/nm



In Reply Refer To:
3071 (F01200)

MAY 22 2012

James McDaniel
XTO Energy
382 Road 3100
Aztec, NM 87410

Dear Mr. McDaniel:

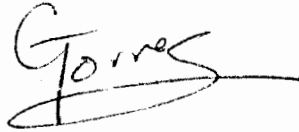
Reference is made to your surface waste disposal facility for the Coronado Pond No. 1 and No. 2. Attached for your reference are the sundry notices which authorize the re-vegetation of the pit area after proper pit closure. The BLM currently has a working Memorandum of Understanding (MOU) with the NMOCD whereby pit closure, closure standards, and reclamation requirements conducted under Rule 19.15.17 NMAC (commonly referred to as the pit rule) are cooperatively managed by both agencies. Although the MOU does not specifically address production pits and subsequent closure, the intent of the MOU is to defer closure requirements to the NMOCD under the pit rule standards and re-vegetation of the site to the BLM.

Your sundry notice indicated that "upon BLM approval, Coronado Ponds No. 1 and No. 2 will no longer be an NMOCD surface waste management facility." In view of the terms of the MOU, your existing permit and permit conditions will have to remain under the authority and purview of the NMOCD until they authorize final pit closure. Upon their approval of the pit closure, BLM will manage the re-vegetation of the site in accordance with the terms of the MOU. As such, BLM's approval of your sundry notices dated March 9, 2012, is hereby amended to reflect that the NMOCD has final pit closure authority for the Coronado Ponds No. 1 and 2. Upon NMOCD's approval of the closure, interim re-vegetation and reclamation responsibilities will be addressed under the terms and conditions of the subject MOU.

Under 43 CFR 3165.3, you may request an Administrative Review of any instructions, orders, or decisions issued by the Authorized Officer. Such a request, including all supporting documents,

must be filed in writing within 20 business days of receipt of this notice and must be filed with the State Director, Bureau of Land Management, P.O. Box 27115, Santa Fe, New Mexico 87502-0115. Such a request will not result in a suspension of the instructions, orders, or decisions unless the reviewing official so determines. Procedures governing appeals from the instructions, orders, or decisions are contained in 43 CFR 3165.4 and 43 CFR 4.400 et. Seq.

Sincerely,

A handwritten signature in black ink, appearing to read "Torres", with a long horizontal stroke extending to the right.

Gary Torres
Field Manager

cc: Brad Jones
NMOCD
1220 South St. Francis Street
Santa Fe, NM 87505

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other **POND**

2. Name of Operator

XTO Energy Inc.

3a. Address

382 CR 3100 Aztec, NM 87410

3b. Phone No. (include area code)

505-333-3204

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SEC. 31-T32N-R8W N.M.P.M.

5. Lease Serial No.

NMM-013642

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

CORONADO POND #1

9. API Well No.

10. Field and Pool, or Exploratory Area

11. County or Parish, State

SAN JUAN NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other RE-VEGETATION |
| <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

- 13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)**

XTO Energy Inc. requests approval to modify the existing closure plan for Coronado Pond #1 located on Lease NMM-013642. Our closure plan was approved by the BLM on March 30, 2011.

Currently, all of the equipment, structures and the pond liners have been removed. The pond has been sampled according to our closure plan and results indicate no release occurred from the pond liners.

XTO (Diane Jaramillo, James McDaniel & Scott Baxstrom) met @ BLM on January 31, 2012 w/Jim Lovato, Bill Leiss, Gary Torrez & Dave Evans. XTO proposes to re-vegetate Coronado Pond #1 as it currently exists and as described on the attachment. The existing fence will remain in place. XTO & BLM will then revisit the location in two years & recontour & reclaim if no beneficial use is planned at that time. Upon your approval, Coronado Pond #1 will no longer be an NMCD surface waste management facility.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

LOREI D. BINGHAM

Title **REGULATORY ANALYST**

Signature

Date **3/9/12**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Branch Chief

Date

3/13/12

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

FPO

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

NMM-013642

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

CORONADO POND #2

9. API Well No.

10. Field and Pool, or Exploratory Area

11. County or Parish, State

SAN JUAN NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <u>RE-VEGETATION</u>
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

XTO Energy Inc. requests approval to modify the existing closure plan for Coronado Pond #2 located on Lease NMM-013642. Our closure plan was approved by the ELM on March 30, 2011.

Currently, all of the equipment, structures and the pond liners have been removed. The pond has been sampled according to our closure plan and results indicate no release occurred from the pond liners.

XTO (Diane Jaramillo, James McDaniel & Scott Baxstrom) met @ ELM on January 31, 2012 w/Jim Lovato, Bill Leiss & Gary Torrez. XTO proposes to re-vegetate Coronado Pond #2 as it currently exists and as described on the attachment. The existing fence will remain in place. XTO & ELM will then revisit the location in two years & recontour & reclaim if no beneficial use is planned at that time. Upon your approval, Coronado Pond #2 will no longer be an NMCD surface waste management facility.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

LORRI D. BINGHAM

Title **REGULATORY ANALYST**

Signature

Date **3/9/12**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Branch Chief

Date

3/13/12

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

FFO

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR COPY



April 20, 2012

Mr. Brad Jones
Oil Conservation Division
1220 South St. Francis Street
Santa Fe, New Mexico 87505

Email: brad.a.jones@state.nm.us
Phone (505) 476-3487

**RE: CENTRALIZED EVAPORATION POND #2 SUNDRY AND RECLAMATION PLAN
OCD PERMIT #NM-02-0001**

Dear Mr. Jones:

Please accept this letter and attached Sundry Notice and Reclamation Plan approved by the Bureau of Land Management (BLM) as the closure documentation for the Centralized Evaporation Pond #2 as a NMOCD Permitted Surface Waste Disposal Facility. The BLM has agreed through the approval of this Sundry and Reclamation Plan to take over final reclamation of this former Surface Waste Disposal Facility. With your approval, this site will be closed as a Surface Waste Disposal Facility managed by the NMOCD, and will be reclaimed pursuant to the reclamation plan approved by the BLM. Please don't hesitate to contact me with questions or comments regarding this project.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'James McDaniel'.

James McDaniel
EH&S Supervisor, CHMM #15676
XTO Energy, Inc.
Western Division



CC: Brandon Powell, NMOCD, Aztec Office

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

RECEIVED

MAR 15 2012

REGULATORY COMPLIANCE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other **POND**

2. Name of Operator

XTO Energy Inc.

3a. Address

382 CR 3100 Aztec, NM 87410

3b. Phone No. (include area code)

505-333-3204

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SEC. 31-T32N-R8W N.M.P.M.

5. Lease Serial No.

NMM-013642

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

CORONADO POND #2

9. API Well No.

10. Field and Pool, or Exploratory Area

11. County or Parish, State

SAN JUAN NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other**RE-VEGETATION**

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

XTO Energy Inc. requests approval to modify the existing closure plan for Coronado Pond #2 located on Lease NMM-013642. Our closure plan was approved by the BLM on March 30, 2011.

Currently, all of the equipment, structures and the pond liners have been removed. The pond has been sampled according to our closure plan and results indicate no release occurred from the pond liners.

XTO (Diane Jaramillo, James McDaniel & Scott Baxstrom) met @ BLM on January 31, 2012 w/Jim Lovato, Bill Leiss & Gary Torrez. XTO proposes to re-vegetate Coronado Pond #2 as it currently exists and as described on the attachment. The existing fence will remain in place. XTO & BLM will then revisit the location in two years & recontour & reclaim if no beneficial use is planned at that time. Upon your approval, Coronado Pond #2 will no longer be an NMCD surface waste management facility.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)**LORRI D. BINGHAM**

Signature

Title **REGULATORY ANALYST**Date **3/9/12**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Bree Iners

Title

Branch Chief

Date

3/13/12

Office

FFO

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR COPY

XTO Pond Reclamation Plan

March 8th, 2012

Prepared By



220 West Main

Farmington, NM 87401

505-327-2486

www.bclenvironmental.com

INTRODUCTION

In 2011, XTO requested Buchanan Consultants, Ltd (BCL) to collect soil samples from two pond sites, Map 1, and provide a reclamation plan. The pond sites are located in San Juan County, NM. Pond 1 is near Gardner 008A well site and Pond 2 near Gardner 007 well site. The native vegetation is primarily a tree/shrub community consisting of Western Wheatgrass, Sagebrush, Rabbitbrush and Utah Juniper.

The objective of the project is to reclaim each pond with native sustainable vegetation. Pond 1 has a total area of 7.56 acres (ac) to be reclaimed a total Pond 2 has an area of 6.85 ac to be reclaimed. The surface soils to be reclaimed for both ponds are a mixture of topsoil and bedrock material.

SOIL RESULTS

Pond 1

The soils range in texture from a sandy clay loam to a clay loam. The amount of bedrock mixed with the native soil is approximately 10%. The organic matter content for the soils is 0.4%, which is low. The electrical conductivity (EC) of the soil is 1.4 mmhos/cm and the sodium absorption ratio (SAR) is 13.8. Neither of these values are limiting to most native vegetation. The content of Sodium (Na) is 664 ppm and the base saturation is 11.3 percent.

Soils with an EC value higher than 4.0 mmhos/cm are saline and limiting to most agricultural crops. Native vegetation, similar to that surrounding Pond 1, is generally not

limited by EC values less than 8 mmhos/cm. SAR values of less than 10 are not limiting to most crops and values of 30 or less are generally not limiting to most native vegetation. The sodium content for this soil is approximately 0.06% and should be reduced if possible. The nitrogen content is 6 ppm as nitrate nitrogen, Phosphorus (P_2O_5) is 64 ppm, and Potassium (K) is 138 ppm. Nitrogen and Potassium are low and deficient for most crops. Some addition of nitrogen and potassium would be beneficial for the establishment of native vegetation. Phosphorus is adequate and does not need to be added. The soil pH is 8.5. An ideal pH is 6.0-6.5 for the establishment of most vegetation. The pH for this site (8.5) is limiting to most crops and somewhat limiting to native plants. The pH should be lowered, which can be accomplished with additions of elemental sulfur.

Pond 2

The soils range in texture from a sandy clay loam to a clay loam. The amount of bedrock mixed with the native soil is approximately 20%. The organic matter content for the soils is 0.4%, which is low. The electrical conductivity (EC) of the soil is 2.7 mmhos/cm and the sodium absorption ratio (SAR) is 26.9. Neither of these values are limiting to most native vegetation. The content of sodium (Na) is 3,336 ppm and the base saturation is 49.7 percent.

Soils with an EC value higher than 4.0 mmhos/cm are saline and limiting to most agricultural crops. Native vegetation, similar to that surrounding Pond 2, is not limited by EC values less than 8 mmhos/cm. SAR values of less than 10 are not limiting to most

crops and values of 30 or less are not limiting to most native vegetation. The sodium content for this soil is approximately 0.3% and needs to be reduced. The nitrogen content is 8 ppm as nitrate nitrogen, Phosphorus (P_2O_5) is 18 ppm, and Potassium (K) is 174 ppm. Nitrogen, Phosphorus and Potassium are deficient for most crops. Some additions of N,P, and K would be beneficial for the establishment of native vegetation. The soil pH is 8.8. An ideal pH is 6.0-6.5. The pH for this site (8.8) is limiting to most crops and somewhat limiting to native plants. The pH should be lowered, which can be accomplished with additions of elemental sulfur.

RECOMMENDATIONS

Pond 1 – 7.56 ac

Seed Bed Preparation, Pond 1

Rip and disc the soils at the site to compensation for medium to highly compacted soils. Ripping should be at least 18” deep and ideally 24”. After ripping, the soils should be disked to a depth of at least 4” and ideally 6”. Disking should be done on the contour. Ripping and disking can be done a few months to a few days before seeding.

Seeding, Pond 1

After disking, the rough surface should be maintained as much as possible. A rough surface is preferred for erosion control. The seed can be broadcast or drilled (broadcast is preferred). Drilling will require a drill-seeder large enough to seed the rough surface.

Seed Mix, Pond 1

The seed mix recommended is provided in Table 1. Seeding just prior to the rainy or monsoon season is preferred. This is typically in late June or early July. After seeding is complete the site should be mulched and crimped as soon as possible, preferably the same day. The mulch can be a native grass hay or straw, the longer the stems the better the mulch. Mulch should be crimped in two directions (cross-crimp) if possible. The application of mulch should be at least two tons per ac with a total of 15.1 tons (2 tons x 7.56 ac) for this site.

Table 1. Seed Mix for Pond 1

Grasses	lbs/ac	lbs/7.56 ac
Western Wheatgrass	10	75.6
Indian Ricegrass	6	45.4
Galleta grass	8	60.5
Sand Dropseed	1	7.6
Blue Grama	2	15.1
Total	27	204.2
Shrubs		
Wyoming Sagebrush	0.5	3.78
Winterfat	2	15.1
Rabbitbrush	1	7.6
Fourwing Saltbrush	2	15.1
Total	5.5	41.6
Grasses & Shrubs Totals	32.5	245.8

Amendments, Pond 1

There are two options for reclaiming Pond 1. The first option requires using the standard rates recommended by the manufacturer for BIOSOL and humate. This option generally achieves optimum results. The second option accepts BCL's recommendations. This option may produce results that are less than optimal. However, based on experience on similar sites, plant establishment would be successful.

Option 1 – The Manufacturer's Recommendation for Pond 1

The amendments can be applied just before, during or just after seeding and always before mulching. The product BIOSOL is applied at 1,500 lbs/ac by the manufacturer recommendation. BIOSOL adds N, P, K and reduces the sodium content of the soils. Pond 1 (7.56 ac) would receive a total of 11,340 lbs of BIOSOL. It is recommended by the manufacturer to add 700 lbs/ac of humate, be added to the site, which is a total of 5,292 lbs to the Pond 1 site. Humate will increase the organic matter content and also add micronutrients. To reduce the pH (8.5), the manufacturer recommends adding 360 lbs/ac of elemental sulfur to lower the pH. A total of 2,722 lbs of sulfur would be added to the Pond 1 site.

Option 2 – BCL's Recommendation for Pond 1

The amendments can be applied just before, during or just after seeding and always before mulching. The product BIOSOL is recommended to be applied at a rate of 1,000 lbs/ac by the BCL. This is based on BCL's experience at other sites. BIOSOL

adds N, P, and K and reduces the sodium content of the soil. Pond 1 (7.56 ac) would receive a total of 7,560 lbs of BIOSOL. It is recommended by BCL to add 500 lbs/ac of humate, which is a total of 3,780 lbs. Humate will increase the organic matter content and also add micronutrients. To reduce the pH (8.5), BCL recommends adding 360 lbs/ac of elemental sulfur to lower the pH. A total of 2,722 lbs of sulfur would be added to the Pond 1 site.

Pond 2 – 6.85 ac

Seed Bed Preparation, Pond 2

Rip and disc the soils at the site to compensation for medium to highly compacted soils. Ripping should be at least 18” deep and ideally 24”. After ripping, the soils should be disked to a depth of at least 4” and ideally 6”. Disking should be done on the contour. Ripping and disking can be done a few months to a few days before seeding.

Seeding, Pond 2

After disking, the rough surface should be maintained as much as possible. A rough surface is preferred for erosion control. The seed can be broadcast or drilled (broadcast is preferred). Drilling will require a drill-seeder large enough to seed the rough surface.

Seed Mix, Pond 2

The seed mix recommended is provided in Table 2. Seeding just prior to the rainy or monsoon season is preferred. This is typically in late June or early July. After seeding is complete the site should be mulched and crimped as soon as possible, preferably the same day. The mulch can be a native grass hay or straw, the longer the stems the better the mulch. Mulch should be crimped in two directions (cross-crimp) if possible. The application of mulch should be at least two tons per ac with a total of 13.7 tons (2 tons x 6.85 ac) for this site.

Table 2. Seed Mix for Pond 2

Grasses	lbs/ac	lbs/6.85 ac
Western Wheatgrass	10	68.5
Indian Ricegrass	6	41.1
Galleta grass	8	52.0
Sand Dropseed	1	6.9
Blue Grama	2	13.7
Total	27	182.2
Shrubs		
Wyoming Sagebrush	0.5	3.4
Winterfat	2	13.7
Rabbitbrush	1	6.85
Fourwing	2	13.7
Total	5.5	37.65
Grasses & Shrubs Totals	32.5	219.9

Amendments, Pond 2

There are two options for reclaiming Pond 2. The first option requires using the standard rates recommended by the manufacturer for BIOSOL and humate. This option generally achieves optimum results. The second option accepts BCL's recommendations. This option may give results that are less than optimal. However, based on experience on similar sites, plant establishment would be successful.

Option 1 – The Manufacturer's Recommendation for Pond 2

The amendments can be applied just before, during or just after seeding and always before mulching. The product BIOSOL is applied at 1,500 lbs/ac by the manufacturer recommendations. BIOSOL adds N, P, K and reduces the sodium content of the soils. Pond 2 (6.85 ac) would receive a total of 10,275 lbs of BIOSOL. It is recommended by the manufacturer to add 700 lbs/ac of humate, which is a total of 4,795 lbs to the Pond 2 site. Humate will increase the organic matter content and also add micronutrients. To reduce the pH, the manufacturer recommends adding 360 lbs/ac of elemental sulfur. A total of 2,466 lbs of sulfur would be added to the Pond 2 site.

Option 2 – BCL's Recommendation for Pond 2

The amendments can be applied just before, during or just after seeding and always before mulching. The product BIOSOL is recommended to be applied at the rate of 1,000 lbs/ac. This is based on BCL's experience at other sites. BIOSOL adds N, P, and K and reduces the sodium content of the soils. Pond 2 (6.85 ac) would receive a total

of 6,850 lbs of BIOSOL. It is recommended by BCL to add 500 lbs/ac of humate, which is a total of 3,425 lbs. Humate will increase the organic matter content and also add micronutrients. To reduce the pH, BCL recommends adding approximately 360 lbs/ac of elemental sulfur. A total of 2,466 lb of sulfur would be added to the Pond 2 site.

