

**SECTION 11**

**CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURCES**

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**SECTION 11**

**CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURCES**

**LIST OF APPENDICES**

**APPENDIX**

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<a href="#">11.A</a>	Section 106 Memorandum of Agreement for the Pinabete Mine Plan	Field Code Changed
<a href="#">11.B</a>	CONFIDENTIAL Cultural Resources Ethnography Report for Area 4 North	Field Code Changed
<a href="#">11.C</a>	CONFIDENTIAL Cultural Resources Ethnography Report for Site NM-H-29-34	Field Code Changed
<a href="#">11.D</a>	CONFIDENTIAL Cultural Resources Ethnography Report for Areas 4 North, 4 South, and 5	Field Code Changed
<a href="#">11.E</a>	CONFIDENTIAL Cultural Resources Class I Inventory Report for Areas 4 North, 4 South, and 5	Field Code Changed
<a href="#">11.F</a>	CONFIDENTIAL Cultural Resources Class II Inventory and Eligibility Evaluation for Area 4 North	Field Code Changed
<a href="#">11.G</a>	CONFIDENTIAL Cultural Resources Compliance Form for Area 4 North	Field Code Changed
<a href="#">11.H</a>	CONFIDENTIAL Cultural Resources Class III Inventory Report for Burnham Road Realignment	Field Code Changed
<a href="#">11.I</a>	CONFIDENTIAL Cultural Resources Compliance Form for Burnham Road Realignment	Field Code Changed
<a href="#">11.J</a>	CONFIDENTIAL Cultural Resources Class II and III Inventory and Eligibility Evaluations for Areas 4 South and 5	Field Code Changed
<a href="#">11.K</a>	CONFIDENTIAL Cultural Resources Data Recovery Plan for Area 4 North	Field Code Changed
<a href="#">11.L</a>	CONFIDENTIAL Cultural Resources Data Recovery Plan for Areas 4 South and 5	Field Code Changed
<a href="#">11.M</a>	CONFIDENTIAL Cultural Resources Eligibility Testing Report for Area 4 North	Field Code Changed
<a href="#">11.N</a>	CONFIDENTIAL Cultural Resources Mitigation Report for Area 4 North	Field Code Changed

**SECTION 11**

**CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURCES**

**LIST OF REVISIONS DURING PERMIT TERM**

<b>REV. NUMBER</b>	<b>REVISION DESCRIPTION</b>	<b>DATE APPROVED</b>
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**SECTION 11 CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURCES**

The cultural, historic, and archaeological resources information covers the Pinabete ~~Mine Plan~~ Permit area (permit area) of ~~BHP~~ Navajo ~~Coal~~ Transitional Energy Company's (~~BNCNTEC~~) mining lease. Information concerning the nature and location of cultural, historic, and archaeological resources and properties, including survey and study reports submitted as part of this permit application package will be maintained as confidential under applicable law. Confidential cultural resources information is provided to and maintained by the Office Surface Mining Reclamation and Enforcement (OSM) separately from non-confidential information.

Pinabete Mine Plan permitting and compliance activities relating to cultural, historic, and archaeological resources and properties on ~~BNCNTEC~~'s leasehold have been, and will be, conducted in compliance with all applicable laws, including without limitation: the National Historic Preservation Act (NHPA) (including the 36 CFR Part 800 implementing regulations), the Archaeological Resources Protection Act (ARPA) (P.L. 95-96), the American Indian Religious Freedom Act (AIRFA) (P.L. 95-341), the Native American Graves Protection and Repatriation Act (NAGPRA), the Navajo Nation Cultural Properties Act (NNCPA), the Navajo Nation Policy to Protect Traditional Cultural Properties (NNTCP), the Navajo Nation Guidelines for the Treatment of Historic, Modern, and Contemporary Abandoned Sites (NNTCS), and the Navajo Nation Policy for the Protection of Jishchaa': Gravesites, Human Remains, and Funerary Items (NNJGH). ~~BNCNTEC~~ will operate in compliance with these statutes, regulations, and policies, as applicable.

Pursuant to NHPA and its implementing regulations, ~~BNCNTEC~~ entered into a Section 106 Programmatic Agreement for the entire Area 4 North area in 2007 (PA 2007). That PA was amended in 2011 as the project area for a revision to ~~BNCNTEC~~'s Navajo Mine Permit (OSM Permit No. NM-0003F) was modified to include a smaller portion of Area 4 North. The 2011 Amended Programmatic Agreement (APA 2011) was developed by OSM, as the lead agency, with the U.S. Army Corps of Engineers (USACE), Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), and the Navajo Nation Historic Preservation Department (NNHPD), also participating as signatory agencies. ~~BNCNTEC~~ is also a signatory to the 2007 PA and the 2011 APA as the project proponent with responsibilities defined in those agreements. The 2011 APA established protocols and procedures for compliance with NHPA, its implementing regulations, and other applicable statutes and regulations. ~~BNCNTEC~~ will comply with the terms and conditions of the 2011 APA, which includes a part of, but does not cover the entire, proposed permit area. Therefore, ~~BNCNTEC~~ anticipates that further NHPA Section 106 compliance work may be appropriate as part of OSM's review of this permit application package (PAP) ~~(Appendix 11.A)~~ Appendix 11.A. However, as discussed below and as reflected in the Appendices 11.B through 11.N, substantial efforts have been made to (a) inventory and evaluate eligibility of cultural resources in the permit area, and

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(b) evaluate adverse effects of prior undertakings and pursue related mitigation efforts in conjunction with previous NHPA Section 106 compliance efforts.

### 11.1 Cultural, Historic, and Archaeological Resources Information

This section describes the multiple surveys, inventories, ethnographic studies, eligibility, testing, mitigation projects, and related work that have been completed to address cultural, historic, and archaeological resources and known archaeological sites within the permit area. These efforts led to recommendations on which cultural resource sites should be considered eligible for listing on the National Register of Historic Places (NRHP). Those recommendations were submitted to OSM, BIA, NNHPD, and other parties to make final eligibility determinations. This section does not contain confidential information such as the nature and location of any resources discovered in the permit area. The studies and reports described below were pursued under the direction and control of OSM, and in accordance with the regulatory requirements of Section 106 of the NHPA and in consultation with the NNHPD and others.

#### 11.1.1 Ethnographic Studies

Three ethnographic studies have been conducted that cumulatively cover the permit area plus a 1-mile buffer. These reports contain locations and descriptions of culturally sensitive areas, sacred/religious places (traditional cultural properties [TCPs]), and burials to the extent that they occur within the permit area. One ethnographic study, conducted by Dinetahdoo CRM in Area 4 North, documented four TCP and eight possible burial locations within the permit area and two TCPs located within one mile of the permit area (Kelley et.al. 2007; [Appendix 11.B](#)). Tsosie and Antonio (2008) conducted a supplemental ethnographic investigation in the same area to provide additional details and information. No new TCPs or burials were identified as a result of the supplemental investigation ([Appendix 11.C](#)).

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A third ethnographic study was conducted by the Navajo Nation Archaeology Department (NNAD) for Areas 4 North, 4 South, and 5 plus a 1-mile buffer zone (Chavez 2006; [Appendix 11.D](#)). This study did not document any new TCPs within the permit area but did document four new TCPs located within one mile of the permit area. The study also documented two new possible burial locations in the permit area. These four new TCPs and two new possible burial locations were not documented in the Kelly et.al. (2007) report. The TCPs and burial locations discussed by Chavez (2006) were evaluated in consideration of NRHP-eligibility regulations, AIRFA, NNTCP, and NNTCS but no official determinations have been made.

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#### 11.1.2 Class I Review

A Class I cultural review has been completed that covers the permit area. The Division of Conservation Archaeology (DCA) of the San Juan County Museum Association completed a Class I cultural review (Meininger and Baker 2006; [Appendix 11.E](#)). The purpose of this Class I cultural review was to examine

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data sources to identify information on prior studies and previously recorded cultural resources within Areas 4 North, 4 South, and 5 plus a 1-mile buffer. The primary data sources for this review were the records of the New Mexico Cultural Resources Information System (NMCRIS), files of NNHPD in Window Rock, Arizona, and files of the Bureau of Land Management (BLM) - Farmington Field Office in Farmington, New Mexico. Ancillary data sources included records maintained by ~~BNCCNTEC~~, DCA, the San Juan County Archaeological Research Center and Library at Bloomfield, New Mexico, the Office of Contract Archeology (OCA) at the University of New Mexico, Albuquerque, and Alpine Archaeological Consultants in Montrose, Colorado.

#### 11.1.3 Class II and Class III Inventory

Three recent inventory reports have been completed that together cover the permit area. First, a Class II inventory and eligibility evaluation of cultural resources was conducted by DCA for Area 4 North (Meininger and Wharton 2004; [Appendix 11.F](#)). The report details the eligibility evaluation of 73 archaeological sites and two In-Use Areas (IUAs). Forty-seven of these archaeological sites and the two IUAs are within the permit area. A Cultural Resource Compliance Form was completed by NNHPD following this survey (NNHPD 2005; [Appendix 11.G](#)).

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A Class III inventory of the Area 4 North portion of the proposed Burnham Road Realignment (approximately 5.2 mi.) was conducted by Ecosystem Management, Inc. (EMI) (Burlison 2006; [Appendix 11.H](#)). This proposed realignment was recently included as part of the 2011 Area 4 North mine plan revision (NM-0003-F-R03) submitted to OSM. The survey located four archaeological sites. Two of these sites are located within the permit area. A Cultural Resource Compliance Form was completed by NNHPD following this survey (NNHPD 2007; [Appendix 11.I](#)).

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Class II and Class III inventory and eligibility evaluations for Areas 4 South and 5 were conducted by DCA. Concurrent with the Class II inventory, the Class III inventory was performed of lands that would be subject to surface disturbance required for the collection of baseline resource data necessary to meet certain Surface Mining Control and Reclamation Act (SMCRA) and related permitting requirements. The data for both the Class II and Class III inventories were provided in one report to BIA, NNHPD, and OSM (Meininger and Wharton 2009; [Appendix 11.J](#)). This report details the location and eligibility evaluation of 198 archaeological sites, and four IUAs. A total of 36 of these archaeological sites and one IUA are within the permit area.

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These investigations involved the location and eligibility evaluation of archaeological sites in order to make recommendations as to the cultural resource significance of the properties with regard to the NRHP, ARPA, AIRFA, NAGPRA, and other applicable statutes and regulations which provide guidance on the treatment of certain cultural resources. As a result of the Class II and III surveys and inventories, a total of 85

archaeological sites and three in-use sites have been located in the permit area. Forty of these sites were determined as eligible to the NRHP by OSM and NNHP (Area 4 North). Thirty-one sites have been recommended as eligible by DCA (Area 4 South) but have yet to be formally determined eligible by OSM and NNHPD. The remaining fourteen archaeological sites and the three in-use sites have been determined or recommended as not eligible.

#### 11.1.4 Research Design and Treatment Plans

Two research designs and treatment plans have been completed that together cover the permit area. Both of these plans were prepared at the direction of OSM following the inventory and eligibility work, and after appropriate consultations. The first was a data recovery and treatment plan prepared by EMI for Area 4 North (Burlison, Phippen, and Yost 2006; [Appendix 11.K](#)). This mitigation plan was developed for eligible sites in Area 4 North using the data and eligibility evaluations completed by Meininger and Wharton (2004) and the Cultural Resources Compliance Form (NNHPD 2005). Thirty-four of these eligible sites are located in the permit area. Eleven of which were recommended for full data recovery and the remaining 23 were recommended for testing.

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The second was a draft research design and treatment plan prepared by the Center for Desert Archaeology (CDA) for Areas 4 South and 5 (Reed, Benally, and Sliva 2009; [Appendix 11.L](#)). This mitigation plan was developed from the data and eligibility evaluations obtained during the Class II and Class III inventories completed by DCA for Areas 4 South and 5 (Meininger and Wharton 2009). This research design includes mitigation recommendations for 31 sites in the southern portion of the permit area. This document will require modification to serve as a basis for data recovery for the permit area.

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#### 11.1.5 Mitigation

Five different phases of mitigation have been completed for cultural, historical, and archaeological resources associated with the permit area. These efforts were pursued under the auspices of OSM and other federal agencies, following appropriate consultation and compliance with NHPA Section 106 and other applicable regulations.

The first phase consisted of an ethnographic, excavation and data recovery program, defined as the Navajo Mine Archaeological Program (NMAP) which was conducted by OCA. (Hogan and Winter 1983). The southern portion of NMAP is within the permit area. OCA mitigated four archaeological sites located within the permit area.

The second phase was a testing program, conducted by EMI for sites in Area 4 North (Burlison et al. 2006; Johnson et.al. 2007; [Appendix 11.M](#)). As a result of the testing, 17 were deemed adequately mitigated by

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the testing, one was deemed outside of Area 4 North, and five sites were recommended for further data recovery.

The third phase was a data recovery program conducted by Woods Canyon Archaeological Consultants, Inc. (WCAC) for 16 sites in Area 4 North (Fetterman 2011; [Appendix 11.N](#)). Eleven of the 16 sites had been selected for data recovery initially and five were added after testing.

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A fourth phase of the mitigation was conducted by WCAC in 2007 for the search of possible human burial locations believed to be in Area 4 North. One burial location was located, fenced, and will be avoided. The remaining possible burial locations were investigated and no remains were encountered. A confidential report describing WCAC's burial investigations within Area 4 North was submitted to NNHPD.

A fifth phase of the mitigation concerned ethnographic resources. This mitigation entailed ethnographic interviews conducted by Dinetahdoo CRM (Kelley et.al. 2007) and a cultural landscape study, conducted by WCAC (Tsosie et.al. 2011). The study presents an overview of Area 4 North from a traditional Navajo perspective. The study examined the origin of the Navajo and the clans of the Navajo that occupied the lease area. It also examined the local landforms as they relate to stories associated with ceremonies. This study was included in the mitigation report (Fetterman 2011) and information was incorporated into a popular report and website which is being produced for the project.

Mitigation work has been proposed for 32 archaeological sites in the permit area that are located in Area 4 South. These include 31 archaeological sites identified in the Area 4 South mitigation plan and the one site that was initially identified as being located in Area 4 North. In addition, mitigation work is recommended for the two potential burial locations in the permit area. The proposed mitigation work will be directed by OSM and NNHPD, following appropriate consultation and compliance with NHPA Section 106 and other applicable regulations.

#### *11.1.6 Summary of the Pinabete Permit Area Cultural Resource Investigations and Recommendations*

The studies described above, among other studies and inventory work, were conducted for use in the NHPA Section 106 compliance process, and for other purposes including compliance with NAGPRA and NNJGH and related regulations and guidance. A total of 85 archaeological sites, three IUAs, four TCPs (and six additional TCPs within one mile of the permit area), and 10 possible burial locations, have been documented in the permit area. Seventy-one of these sites were recommended or determined eligible. Thirty-nine of these sites have been mitigated: 17 by testing, 16 by data recovery, and six by ethnographic efforts. The remaining 32 eligible archaeological sites in the permit area are recommended for further evaluation, consultation and potential discussion concerning resolution of adverse effects.

The three IUAs in the permit area are less than 50 years in age and are therefore recommended as ineligible for the NRHP. Two of the 10 TCPs, in the permit area or its 1-mile buffer, are currently recommended as potentially eligible for the NRHP. Further determinations concerning eligibility and mitigation for the TCPs may be required along with appropriate consultation.

Ten possible burial locations are within the permit area. Eight of the 10 possible burial locations have been investigated. One burial has been located, fenced, and will be avoided. The remaining seven possible burial locations were investigated and no remains were encountered. The remaining two possible burial locations will be investigated.

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Ecosphere Environmental Services  
Farmington, NM

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