

MT NEBO SCIENTIFIC, INC.  
research & consulting

December 7, 1999

Utah Coal Regulatory Program  
 STATE OF UTAH  
 Division of Oil, Gas & Mining  
 1594 West North Temple, Suite 1210  
 Salt Lake City, Utah 84114-5801

**RE:** Soil and Reclamation Information  
 Wellington Preparation Plant (ACT/007/012)

Dear Coal Program Members:

Enclosed please find a Mining & Reclamation Plan amendment for the Wellington Preparation Plant (dated December 9, 1999). The purpose of this submittal is to respond to deficiencies from a Technical Analysis by the Division dated November 3, 1999.

A "Comments & Instructions" page has been included along with the C1 and C2 forms to facilitate insertion in the MRP. Please call if you have questions or comments.

Sincerely,

Patrick D. Collins, Ph.D.  
 Resident Agent/Environmental Consultant

cc: D. Schwehr (NEICO)  
 R. Hinckley (NEICO) w/o enclosures

File in:

- Confidential  
 Shelf  
 Expandable

Refer to Record No. 0018 Date 01/10/2005  
 In C/0070012 Incoming  
 For additional information

RECEIVED

JAN 10 2005

DIV. OF OIL, GAS & MINING

# APPLICATION FOR PERMIT PROCESSING

<input checked="" type="checkbox"/> Change	<input type="checkbox"/> New Permit	<input type="checkbox"/> Renewal	<input type="checkbox"/> Transfer	<input type="checkbox"/> Exploration	<input type="checkbox"/> Bond Release	Permit Number: ACT/007/012
Title of Proposal: Soils Information Requested by the Division (December 9, 1999)						Mine: WELLINGTON PREP. PLANT
						Permittee: NEICO

Description, include reason for application and timing required to implement:

**Instructions:** If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease.
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	2. Is the application submitted as a result of a Division Order? DO #
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	4. Does application include operations in hydrologic basins other than as currently approved?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	6. Does the application require or include public notice/publication?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	9. Is the application submitted as a result of a Violation? NOV #
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain:
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	11. Does the application affect the surface landowner or change the post mining land use?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	15. Does application require or include soil removal, storage or placement?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	17. Does the application require or include construction, modification, or removal of surface facilities?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	18. Does the application require or include water monitoring, sediment or drainage control measures?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	19. Does the application require or include certified designs, maps, or calculations?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

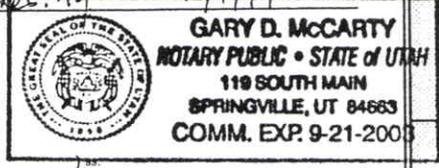
Attach 3 complete copies of the application.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein. (R645-301-123)

*Karen D. Collins* Pres. Ag 12/7/99  
 Signed - Name - Position - Date

Subscribed and sworn to before me this 7 day of Dec, 1999

*[Signature]*  
 Notary Public 9/21 2003  
 STATE OF UTAH  
 COUNTY OF UTAH



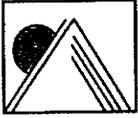
Received by Oil, Gas & Mining

**RECEIVED**  
**JAN 10 2005**

DIV. OF OIL, GAS & MINING

ASSIGNED TRACKING NUMBER





**MT NEBO SCIENTIFIC, INC.**

*research & consulting*

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Comments & Instructions  
for Insertions to the Mining & Reclamation Plan  
of the Wellington Preparation Plant  
ACT/007/012

December 9, 1999

Submitted to the State of Utah, Division of Oil, Gas & Mining  
Change in Operator & Other Appropriate Information

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**Comment:**

In a Technical Analysis by the Division (dated 11/3/99) responding to NEICO's submittal dated 11/1/99, the following statements were made.

*"R645-301-230, The application needs to include laboratory results for the coal or coal refuse material in the coal handling and storage area. This needs to include a description of the sampling methodology."*

This information has been include in this submittal. See Instructions below.

**Instructions:**

Sec. 2.22, p. 271-278, 12/9/99, of this submittal should be added to end of Sec. 2.22 of the current approved MRP after APPENDIX B - SOIL LABORATORY REPORT.

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**Comment:**

In a Technical Analysis by the Division (dated 11/3/99) responding to NEICO's submittal dated 11/1/99, the following statements were made.

*"R645-301-R645-301-230, R645-301-521.160, R645-301-240, The reclamation plan for the coal storage and processing area is not adequate. Even if the coaly material in this area is ultimately shown to be non-toxic, covering it with six inches of soil is not likely to result in adequate vegetation."*

The reclamation plan has been changed in this submittal. See Instructions below.

**Instructions:**

Sec. 3.41, p. 44-45, 12/9/99, of this submittal replaces Sec. 3.41, p. 44-45, 6/16/95, of the current approved MRP [or Sec. 3.41, p. 44-45, 1/1/99 (typo should have read: 11/1/99), not yet fully approved submittal].

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## 9. 9<sup>th</sup> Sample Period

### Introduction

As requested by suggested by the State of Utah, Division of Oil, Gas & Mining (DOGGM), soil (coal) samples were taken from the reclaimed coal storage area at the Wellington Preparation Plant site to explore the potential of acid and toxic properties. The 9<sup>th</sup> Sample Period outlines the methods and results from the sampling.

### Methods

A sample design was planned on-site by Robert Davidson (DOGGM) and Patrick Collins (Mt. Nebo Scientific, Inc.) on January 28, 1999. The plan was implemented on February 1, 1999 and is explained below.

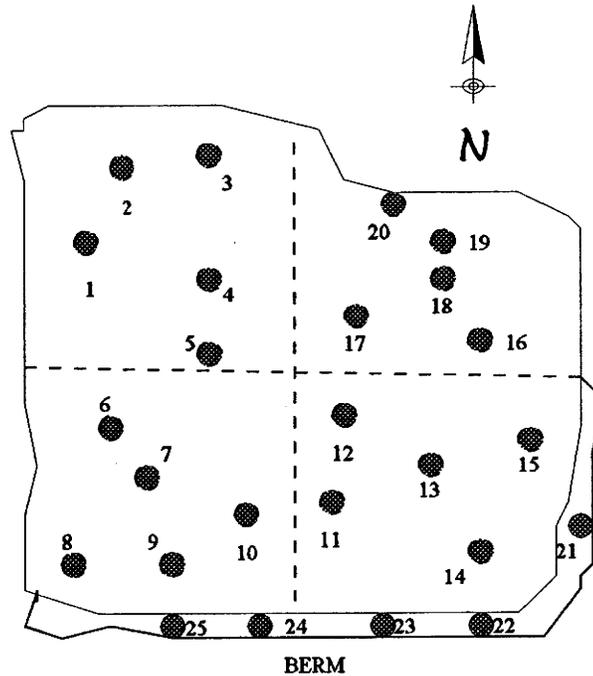
First, the entire old coal storage area was divided in quarters. Within each quarter 5 wooden stakes were numbered, flagged, and placed in the ground by random methods. At each of these 5 locations, a backhoe operator dug sample pits to the depth of the coal material or until the native soils were reached.

The first samples (1-5) were taken in the northwest quarter of the coal storage area followed by the southwest quarter (6-10), then the southeast quarter (11-15) and finally the northeast quarter (16-20). Five additional samples (21-25) were taken at regular intervals along the existing berm in the area. This berm was previously created using the coal material from the storage area. The five samples from each quarter were combined to make one composite sample per quarter and one for the berm area (see Coal Sample Numbers and Locations below).

COAL SAMPLE NUMBERS AND LOCATIONS

SAMPLES	COMPOSITE SOIL NUMBER (SAMPLE DATE)	LOCATION QUARTER
1-5	Wellington 1C (2/1/99)	northwest
6-10	Wellington 2C (2/1/99)	southwest
11-15	Wellington 3C (2/1/99)	southeast
16-20	Wellington 4C (2/1/99)	northeast
21-25	Wellington 5C (2/1/99)	berm

A general sample map was made in the field to show the relative position of each sample. Another map is show below to illustrate the sample plan.



General Sample Map of the Coal Storage Area

After mixing the soils/coal samples to make composite samples, one sample was taken to Soils Lab at Brigham Young University in Provo, Utah for most of the parameters to be tested. Another sample of each area was sent to Inter-Mountain Lab in Farmington, New Mexico to analyze for selenium.

All parameters requested by the DOGM for this area are shown below. Depth of coal material was also recorded at each sample location.

Brigham Young University	Inter-Mountain Lab
EC pH Acid forming potential Boron	Selenium

## Results

Following are the results for the laboratory analyses shown from the original lab forms.

Soil and Plant Analysis Lab  
255 WIDB  
Brigham Young University  
Provo, Utah 84602  
801-378-2147

Name: Mt. Nebo Scientific  
Address: 330 E. 400 S. Suite 6  
City, ST, ZIP: Springville, UT 84663  
Date: 2-10-99

SOIL ID: Wellington Composite

Customer Sample ID	pH	ECX10 <sup>3</sup>	% S	%CaCO <sub>3</sub>	AP	NP	ABP
C1	7.52	5.20	0.16	8.25	5.00	82.50	77.50
C2	7.44	6.00	0.19	2.34	5.94	23.40	17.46
C3	7.52	6.60	0.19	4.13	5.94	41.30	35.36
C4	7.66	6.60	0.15	5.77	4.69	57.70	53.01
C5	7.63	7.80	0.19	3.36	5.94	33.60	27.66

Soil and Plant Analysis Lab  
255 WIDB  
Brigham Young University  
Provo, Utah 84602  
301-378-2147

Name: Mt. Nebo Scientific  
Address: 330 E. 400 S. Suite 6  
City, ST, ZIP: Springville, UT 84663  
Date: 2-10-99

SOIL ID: Wellington Composite

Customer Sample ID	ppm B
C1	5.24
C2	5.08
C3	5.36
C4	5.95
C5	6.53



February 11, 1999

Dr. Patrick Collins  
Mt. Nebo Scientific, Inc.  
330 East 400 South, Suite 6  
PO Box 337  
Springville, UT 84663

Dear Dr. Collins:

Attached are the results of the analyses performed on the soil samples received by IML on February 5, 1999. The samples were labeled Wellington Composite (C1 - C5), and correspond to IML lab numbers S00778 - 82. The requested analysis for each was selenium (AB\_DTPA extraction).

If you have any questions or comments, please feel free to contact me at 1-800-828-1409.

Sincerely,

Eric J Jaquez  
IML - Farmington, NM

enclosure: analytical report



**Inter-Mountain Laboratories, Inc.**

Farmington, New Mexico 87401

2506 West Main Street

Tel. (505) 326-4737

Page 1 of 2

Client Project ID: Wellington Coal

IML Project #0399S00778

Date Received: 02/05/99

Report Date: 02/11/99

**Mt. Nebo Scientific, Inc.**  
Springville, UT

Lab Id	Sample Id	Depths	Se ABDTPA mg/Kg
0399S00778	C1	N/A	0.05
0399S00779	C2	N/A	0.07
0399S00780	C3	N/A	0.05
0399S00781	C4	N/A	0.06
0399S00782	C5	N/A	0.07



**Inter-Mountain Laboratories, Inc.**

Farmington, New Mexico 87401

2506 West Main Street

Tel. (505) 326-4737

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**Mt. Nebo Scientific, Inc.**  
Springville, UT

IML Project #0399S00778  
Report Date: 02/11/99

Client Project ID: Wellington Coal  
Date Received: 02/05/99

Lab Id	Sample Id	Depths	Se	
			ABDTPA	mg/kg
0399S00780	C3	N/A	0.05	
0399S00780D	C3	N/A	0.05	

## Coal Storage and Processing Area

### *Removal of Coal Material*

As described earlier, this area was used for coal storage and processing of coal product for the Crandall Canyon Mine. Some coal material currently remains on the surface in the area. Recent soil sampling for a proposed project suggested there may be elevated levels of boron which could affect plant growth at the time of final revegetation. Therefore, prior to implementing revegetation techniques in the area, and if the material has not been sold or removed as coal product, the coal material will be placed on the Coarse Refuse Pile that lies adjacent to the Coal Storage and Processing Area.

### *Soil Ripping*

To relieve compaction following grading to blend in with the surrounding areas, soil ripping will be implemented in the Coal Storage and Processing Area (if necessary). The depth of the ripping would be one foot (1 ft).

### *Topsoil*

The area will be topsoiled with 6 inches of topsoil from the borrow area.

### *Gouging*

Gouging is a surface configuration composed of a series of

depressions in the ground to harvest water to enhance revegetation [see "Description of Planting and Seeding Techniques To Be Used (or Investigated) For Reclamation, Sec. 3.41]. Gouging will be implemented in this area.

#### *Fertilization*

The area will have approximately 80 lbs./acre N and 80-160 lbs./acre P incorporated into the final seed bed. These amounts will be confirmed following final topsoil sampling and analyses.

#### *Seeding*

The seed mixture that is presently recommended for final reclamation is also shown in this section of the MRP. However, several species and mixtures are presently being tested within a reclamation test plot implemented in 1990. For more information refer to Section 3.41, "Reclamation Test Plots" and to Appendix A.

The seed mixture will be drilled using a rangeland drill in most areas. Other smaller and more localized areas will be broadcast seeded and covered.

#### *Mulch*

The entire area will be mulched at the rate of 2 tons per acre with certified noxious weed-free straw or alfalfa hay. The mulch will be crimped or otherwise tacked to the ground.