Mine file

0011

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

September 10, 1990

CERTIFIED RETURN RECEIPT REQUESTED
No. P 075 063 359

Mr. Robert H. Hagen, Director
Albuquerque Field Office
Office of Surface Mining
Reclamation and Enforcement
Suite 310, Silver Square
625 Silver Avenue, S.W.
Albuquerque, New Mexico 87102

Dear Mr. Hagen:

Re: TDN X90-02-107-12, Wellington Prep Plant, ACT/007/012, Genwal Coal Company, Folder #5, Carbon County, Utah

Your August 31, 1990 letter states, "In order to more fully evaluate the potential for runoff from the outslope of the refuse pile, AFO requests that DOGM provide the results of the computer analysis with all the input parameters." The Division is supplying the requested analysis which shows runoff from the outslope to be insignificant.

In previous reviews of these situations, including consultation with OSM technical specialists, the need for a diversion at the toe of the refuse pile was not apparent. The November 22, 1988 OSM memorandum would surely have stated the need for the outslope diversion if it was indeed needed. The diversion to safely pass no runoff from a 100-year 6-hour precipitation event is simply no diversion. In light of this finding, the Division respectfully requests that TDN X90-02-107-12 be withdrawn.

Sincerely,

Lowell P. Braxton
Associate Director, Mining

vb
Attachment
cc: D. Haddock
R. Summers
MI78/3

an equal opportunity employer

S Form 3800, June 1985

P 075 063 359

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

| | |
|---|---|
| Postage | $ |
| Certified Fee | |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt showing to whom and Date Delivered | |
| Return Receipt showing to whom, Date, and Address of Delivery | |
| TOTAL Postage and Fees | $ |
| Postmark or Date | 9-11-90 |

SENDER
ROBERT H HAGEN DIR
AFO-OSM-R&E
SUITE 310 SILVER SQ
625 SILVER AVE SW
P.O. State and ZIP Code
ALBUQUERQUE NM 87102

DOGM VB TDN X90-02-107-12 ACT/007/012

STICK POSTAGE STAMPS TO ARTICLE TO OFFER FIRST CLASS POSTAGE, CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (See below)

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address on the receipt attached and present the article at a post office service window or hand it to your rural carrier (no extra charge).

2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.

3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article RETURN RECEIPT REQUESTED adjacent to the number.

4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse RESTRICTED DELIVERY on the front of the article.

5. Enter fees for the services requested in the appropriate spaces on the front of this notice. If return receipt is requested, check the applicable blocks in Item 1 of Form 3811.

6. Save this receipt and present it if you make inquiry.

P.S. Form 3800, June 1985 U.S.G.P.O. 1985-27

DOGM VB TDN X90-02-107-12 ACT/007/012

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☒ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

**3. Article Addressed to:**
ROBERT H HAGEN DIR
ALBUQUERQUE FIELD OFFICE
OFFICE OF SURFACE MINING R & E
STE 310 SILVER SQ
625 SILVER AVE SW
ALBUQUERQUE NM 87102

**4. Article Number**
P 075 063 359

**Type of Service:**
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

**5. Signature — Address**
X

**6. Signature — Agent**
X Wilson Henry

**7. Date of Delivery**
9/12/90

**8. Addressee's Address** *(ONLY if requested and fee paid)*

ALBUQUERQUE NM 87102 USPO STATION SEP 13 1990

**PS Form 3811,** Mar. 1988 ★ U.S.G.P.O. 1988-212-865 **DOMESTIC RETURN RECEIPT**

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

**SENDER INSTRUCTIONS**
Print your name, address and ZIP Code in the space below.
- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE USE, $300

U.S.MAIL

RETURN TO

Print Sender's name, address, and ZIP Code in the space below.

STATE OF UTAH
NATURAL RESOURCES
OIL, GAS, & MINING
3 TRIAD CENTER, SUITE 350
SALT LAKE CITY, UTAH 84180-1203

# HYDROLOGY AND SEDIMENTOLOGY MANUAL

Prepared for

Office of Surface Mining, Region V

Denver, Colorado

Contract No: J7000584

Technical Project Officer: John Nadolski

BY

J.F. SATO AND ASSOCIATES
Ginger K. Sunday
James F. Sato
Helen M. Weagraff

SIMONS, LI & ASSOCIATES, INC.
Kenneth G. Eggert
Ruh-Ming Li
James D. Schall
Mark R. Peterson
Wen-Sheng Liang

SHEPHERD WATER GEOLOGISTS
Russell G. Shepherd

Table 2.16. Runoff Curve Numbers (CN) for Hydrologic Soil - Cover Complexes[1]

| Land use or cover | Treatment or practice[4] | Hydrologic condition for infiltrating | Hydrologic soil group A | B | C | D |
|---|---|---|---|---|---|---|
| I. Agricultural Use (from USBR, 1977) | | | | | | |
| Fallow | SR | | 77 | 86 | 91 | 94 |
| Row crops | SR | Poor | 72 | 81 | 88 | 91 |
| | SR | Good | 67 | 78 | 85 | 89 |
| | C | Poor | 70 | 79 | 84 | 88 |
| | C | Good | 65 | 75 | 82 | 86 |
| | C&T | Poor | 66 | 74 | 80 | 82 |
| | C&T | Good | 62 | 71 | 78 | 81 |
| Small grain | SR | Poor | 65 | 76 | 84 | 88 |
| | SR | Good | 63 | 75 | 83 | 87 |
| | C | Poor | 63 | 74 | 82 | 85 |
| | C | Good | 61 | 73 | 81 | 84 |
| | C&T | Poor | 61 | 72 | 79 | 82 |
| | C&T | Good | 59 | 70 | 78 | 81 |
| Close-seeded legumes[2] or rotation meadow. | SR | Poor | 66 | 77 | 85 | 89 |
| | SR | Good | 58 | 72 | 81 | 85 |
| | C | Poor | 64 | 75 | 83 | 85 |
| | C | Good | 55 | 69 | 78 | 83 |
| | C&T | Poor | 63 | 73 | 80 | 83 |
| | C&T | Good | 51 | 67 | 76 | 80 |
| Pasture or range | | Poor | 68 | 79 | 86 | 89 |
| | | Fair | 49 | 69 | 79 | 84 |
| | | Good | 39 | 61 | 74 | 80 |
| | C | Poor | 47 | 67 | 81 | 88 |
| | C | Fair | 25 | 59 | 75 | 83 |
| | C | Good | 6 | 35 | 70 | 79 |
| Meadow (permanent) | | do | 30 | 58 | 71 | 78 |
| Woods (farm woodlots) | | Poor | 45 | 66 | 77 | 83 |
| | | Fair | 36 | 60 | 73 | 79 |
| | | Good | 25 | 55 | 70 | 77 |
| Farmsteads | | | 59 | 74 | 82 | 86 |
| Roads (dirt)[3] | | | 72 | 82 | 87 | 89 |
| (hard surface)[3] | | | 74 | 84 | 90 | 92 |
| II. Surface Mine Use (OSM, 1981) | | | | | | |
| Surface facilities | | | | | | |
| Paved | | | 98 | 98 | 98 | 98 |
| Gravel | | | 76 | 85 | 89 | 91 |
| Dirt | | | 72 | 82 | 87 | 89 |
| Disturbed area (active mining) | | | 72 | 81 | 88 | 91 |
| Reclaimed spoil (with vegetated cover) | | | 39-72 | 61-81 | 74-88 | 80-91 |

Notes:
1. These CN values are for antecedent moisture condition II (AMC-II). To find the proper CN for AMC-III or AMC-I, use the CN from this table in Table.
2. Close-drilled or broad cast.
3. Including right-of-way.

ESTIMATED RETURN PERIODS FOR SHORT DURATION PRECIPITATION
(inches)

Station: Price
Latitude: 39° 37'

Elevation: 5680
Longitude: 110° 50'

| RETURN PERIOD (years) | DURATION 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 2 Hr | 3 Hr | 6 Hr | 12 Hr | 24 Hr |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .08 | .13 | .17 | .23 | .29 | .37 | .44 | .62 | .78 | .95 |
| 2 | .12 | .18 | .23 | .32 | .40 | .49 | .58 | .80 | 1.00 | 1.20 |
| 5 | .16 | .25 | .32 | .44 | .56 | .68 | .79 | 1.07 | 1.32 | 1.58 |
| 10 | .20 | .31 | .39 | .54 | .68 | .81 | .94 | 1.25 | 1.53 | 1.82 |
| 25 | .24 | .37 | .47 | .65 | .82 | .98 | 1.13 | 1.50 | 1.83 | 2.18 |
| 50 | .28 | .43 | .54 | .75 | .95 | 1.12 | 1.29 | 1.71 | 2.08 | 2.47 |
| 100 | .31 | .49 | .62 | .85 | 1.08 | 1.27 | 1.45 | 1.91 | 2.32 | 2.74 |

Station: Promontory Point (Saline)
Latitude: 41° 13'

Elevation: 4230
Longitude: 112° 29'

| RETURN PERIOD (years) | DURATION 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 2 Hr | 3 Hr | 6 Hr | 12 Hr | 24 Hr |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .16 | .24 | .31 | .43 | .54 | .57 | .60 | .68 | .75 | .82 |
| 2 | .18 | .27 | .35 | .48 | .61 | .67 | .72 | .85 | .97 | 1.09 |
| 5 | .21 | .32 | .40 | .56 | .71 | .80 | .89 | 1.11 | 1.31 | 1.51 |
| 10 | .22 | .34 | .43 | .60 | .76 | .88 | .99 | 1.28 | 1.53 | 1.80 |
| 25 | .26 | .40 | .50 | .70 | .88 | 1.03 | 1.17 | 1.53 | 1.85 | 2.18 |
| 50 | .27 | .42 | .53 | .73 | .93 | 1.11 | 1.28 | 1.71 | 2.09 | 2.49 |
| 100 | .29 | .45 | .57 | .79 | 1.00 | 1.21 | 1.41 | 1.90 | 2.34 | 2.80 |

CIVIL SOFTWARE DESIGN

SEDCAD+ Version 3.0

WELLINGTON REFUSE OUTSLOPES

by

Name: mrc

Company Name: Office of Surface Mining - TIPS
File Name: C:\SEDCAD3\JUNK

Date: 09-07-1990

Civil Software Design -- SEDCAD+ Version 3.0

Copyright (C) 1987-1990. Pamela J. Schwab. All rights reserved.

Company Name: Office of Surface Mining - TIPS
Filename: C:\SEDCAD3\JUNK User: mrc
Date: 09-07-1990 Time: 08:41:15
WELLINGTON REFUSE OUTSLOPES
Storm: 1.91 inches, 100 year- 6 hour, SCS 6 Hour
Hydrograph Convolution Interval: 0.1 hr

SUBWATERSHED/STRUCTURE INPUT/OUTPUT TABLE

-Hydrology-

| JBS | SWS | Area (ac) | CN | UHS | Tc (hrs) | K (hrs) | X | Base-Flow (cfs) | Runoff Volume (ac-ft) | Peak Discharge (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|
| 111 | 1 | 0.96 | 41 | M | 0.050 | 0.000 | 0.000 | 0.0 | 0.00 | 0.00 |
| | | Type: Null | | Label: WELLINTON REFUSE OUTSLOPES | | | | | | |
| 111 | Structure | 0.96 | | | | | | | 0.00 | |
| 111 | Total IN/OUT | 0.96 | | | | | | | 0.00 | 0.00 |

```
:Project Title          = WELLINGTON REFUSE OUTSLOPES                    :
:WATERSHED HYDROGRAPH                                                    :
:     Inflow into structure #  1                                         :
: -   Structure type:          Null                                      :
:                                                                        :
:                                                                        :
:-- Watershed data for watershed # 1                                     :
:    Curve number          =    41.0                                     :
:    Area                  =     1.0 acres                               :
:    Hydraulic length      =    0.00 feet                                :
:    Elevation change      =     0.0 feet.                               :
:    Concentration time    =    0.05 hours                               :
:    Unit hydrograph type = Disturbed                                     :
:                                                                        :
:-- Total Area            =     1.0 acres                                :
:                                                                        :
:-- Storm data                                                           :
:    Total precipitation   =     1.9 inches                              :
:    Storm type            = SCS 6 hour design storm                     :
:    Peak Discharge        =    0.00 cfs                                 :
:    Discharge volume      =    0.00 acre ft                             :
:                                                                        :
: <press return to continue or {esc} to skip detail printout>            :
SDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD=
```

FROM: "STORM" (G. Macintosh, OSM, TIPS)

INPUT SUMMARY
FOR W.S.: WELLINGTON REFUSE OUTSLOPES

| STORM: | WATERSHED: |
|---|---|
| DISTRIBUTION =SCS TYPE 'B' | LAND SLOPE = 0.0000 PCT |
| | CURVE NUMBER = 41.00 |
| PRECIP.DEPTH = 1.91 IN | CHANNEL LENGTH = 0.00 FT |
| | TIME OF CONC. = 0.0500 HR |
| DURATION = 6.00 HR | AREA = 0.96 AC |
| NUMBER OF LINES = 915 | D = 0.0067 HR |

FROM: "PEAK" (Hawkins, Marshall)

"PEAK"

WELLINGTON REFUSE OUTSLOPES

1

RUNOFF DEPTH = 0.0000 IN
INITIAL ABSTRACTION = 2.8780 IN
PEAK FLOW = 0.00 CFS-( 0.0000 IPH)
AT T = 6.10 HRS

Ü

0 á áááááááá áááááááááá áááááááááá áááááááááá áááááááááá áááááááááá áááááááááá

0 TIME (Hrs.) 7

OUTPUT SUMMARY

---

RUNOFF DEPTH = 0.0000 IN
INITIAL ABSTRACTION = 2.8780 IN
PEAK FLOW = 0.00 CFS ( 0.0000 IPH)
AT T = 6.10 HRS

---