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CO-OP MINING COMPANY

P.O. Box 1245
Huntington, Utah 84528

Office (801) 687-2450
FAX (801) 687-5238
Coal Sales (801) 687-5777

January 8, 1996

Peter Hess
Utah Division of Oil, Gas & Mining
C.E.U. Box 169, 451 East 400 North
Price, Utah 84501-2699

Mr. Hess,

Re: Coal Recovery Bin Reclamation, Bear Canyon ACT/015/025-95N, Emery County, Utah

Enclosed are 8 finalized copies of the above-referenced amendment, which was approved per Division letter dated December 18, 1995.

If you have any questions, please call me at (801) 687-2450.

Thank You,

Charles Reynolds,
Environmental Coordinator

Enclosure(s)

CO-OP MINING COMPANY

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December 5, 1995

Peter Hess
Utah Division of Oil, Gas & Mining
C.E.U. Box 169, 451 East 400 North
Price, Utah 84501-2699

Mr. Hess,

Re: Coal Recovery Bin Reclamation, Bear Canyon ACT/015/025, Emery County, Utah

95N

Enclosed is a DRAFT copy of an ammendment which reduces the bond for the coal recovery bin. Reclamation of the bin was completed on November 15, 1995. The ammendment also includes a modification to the disturbed boundary line to include the pipeline from the fuel storage tank to the fuel pumps. Upon approval, finalized copies will be sent to the Division.

If you have any questions, please call Charles Reynolds at (801) 687-2450.

Thank You,

Wendell Owen

Wendell Owen,
Resident Agent

Enclosure(s)
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Form DOGM - C1 (Last Revised 6/93) File Folder # 3

APPLICATION FOR PERMIT CHANGE

Title of Change: Coal Recovery Bin / Fuel Line

Permit Number: ACT/015/025

Mine: Bear Canyon

Permittee: Coop Mining Co.

Description, include reason for change and timing required to implement:
Removal of Coal Recovery Bin Complete. Inspector requested Fuel pipeline to be included in disturbed Area Boundary during November Inspection

☐ Yes	☒ No	1. Change in the size of the Permit Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	☒ No	2. Change in the size of the Disturbed Area? < 0.001 acres acres ☐ increase ☐ decrease.
☐ Yes	☒ No	3. Will permit change include operations outside the Cumulative Hydrologic Impact Area?
☐ Yes	☒ No	4. Will permit change include operations in hydrologic basins other than currently approved?
☐ Yes	☒ No	5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	☒ No	6. Does permit change require or include public notice publication?
☐ Yes	☒ No	7. Permit change as a result of a Violation? Violation #
☐ Yes	☒ No	8. Permit change as a result of a Division Order? D.O.#
☐ Yes	☒ No	9. Permit change as a result of other laws or regulations? Explain:
☐ Yes	☒ No	10. Does permit change require or include ownership, control, right-of-entry, or compliance information?
☐ Yes	☒ No	11. Does the permit change affect the surface landowner or change the post mining land use?
☐ Yes	☒ No	12. Does permit change require or include collection and reporting of any baseline information?
☐ Yes	☒ No	13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes	☒ No	14. Does permit change require or include soil removal, storage or placement?
☐ Yes	☒ No	15. Does permit change require or include vegetation monitoring, removal or revegetation activities?
☒ Yes	☐ No	16. Does permit change require or include construction, modification, or removal of surface facilities?
☐ Yes	☒ No	17. Does permit change require or include water monitoring, sediment or drainage control measures?
☒ Yes	☐ No	18. Does permit change require or include certified designs, maps, or calculations?
☐ Yes	☒ No	19. Does permit change require or include underground design or mine sequence and timing?
☐ Yes	☒ No	20. Does permit change require or include subsidence control or monitoring?
☒ Yes	☐ No	21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?
☐ Yes	☒ No	22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied dwelling?
☐ Yes	☒ No	23. Is this permit change coal exploration activity ☐ inside ☐ outside of the permit area?

☐ **Attach 3 complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.**

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.

Wendell Owen Res Agent 12/5/95
Signed - Name - Position - Date

Subscribed and sworn to before me this 5 day of Dec., 19 95.

Notary Public

My Commission Expires: _____, 19____

Attest: STATE OF _____

COUNTY OF _____ ss:

Received by Oil, Gas & Mining

ASSIGNED PERMIT CHANGE NUMBER

Application for Permit Change
Detailed Schedule of Changes to the Permit

Title of Change: Coal Recovery Bin / Fuel Line

Permit Number: ACT/015/025

Mine: Bear Canyon

Permittee: Co-Op Mining Co.

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit change. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the exiting mining and reclamation plan. Include page, section and drawing numbers as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☐ ADD	☒ REPLACE	☐ REMOVE	3-83, 3-86, 3-90, 3-91, 3-92, 3-97, 3-105 — Bond
☐ ADD	☐ REPLACE	☐ REMOVE	Calculations revised for Coal Recovery Bin Reclamation
☐ ADD	☐ REPLACE	☐ REMOVE	(Pg. 3-90 to be reformatted only. No changes to contents
☐ ADD	☐ REPLACE	☐ REMOVE	on this page)
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☒ REPLACE	☐ REMOVE	3A-2, 3A-6, 3A-14 — Surface Facilities Section
☐ ADD	☐ REPLACE	☐ REMOVE	revised to reflect Coal Recovery Bin Reclamation
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☒ REPLACE	☐ REMOVE	2-4C, 7-1C, 3-2C, 8-5C, 7-5, 8-1 — ~~[illegible]~~
☐ ADD	☐ REPLACE	☐ REMOVE	Disturbed Boundary modified to include Fuel Line
☐ ADD	☐ REPLACE	☐ REMOVE	Shown on Plate 2-4C, Coal Recovery Bin Removed from
☐ ADD	☐ REPLACE	☐ REMOVE	Plates (Concrete Foundation which is to remain in place
☐ ADD	☐ REPLACE	☐ REMOVE	Shown on Plate 2-4C)
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
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☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

3.6.8 Reclamation Bonding

BOND

CO-OP MINING COMPANY

BEAR CANYON MINE

ACT/015/025, EMERY COUNTY, UTAH

3.6.8.1 Detailed Timetable for Completion of Major Reclamation Processes

The following schedule of reclamation is proposed to be initiated within 90 days (weather permitting) of final abandonment of the mining operation:

		Accumulated Time
a.	Seal Portals - 1.5 weeks	1.5 weeks
b.	Remove Structures - ~~8.3~~ 7.7 weeks	9.~~82~~ weeks
c.	Soil Replacement and Ripping - 8.6 weeks	~~18.4~~7.8 weeks
d.	Channel Restoration - 2.2 weeks	20.~~60~~ weeks
e.	Revegetation - 1 week	21.~~60~~ weeks

The above reclamation tasks can, therefore, be completed within 21.~~60~~ weeks following the start of reclamation activities.

Summary of Reclamation Cost Estimate

a.	Seal Portals and Backfill	$ 45,500.00
b.	Removal of Structures	~~$ 66,639.36~~ $ 63,815.97
c.	Soil Placement and Ripping	$ 76,398.32
d.	Channel Restoration	$ 51,045.00
e.	Revegetation	$ 44,119.78
f.	Monitor Well Plugging	$ 114.32
g.	Maintenance and Monitoring of Subsidence, Vegetation and Erosion (10 yr bond liability Period)	$ 39,143.20
h.	Hydrology Monitoring (10 yr bond liability period)	$ 29,630.00
i.	Supervision (21.~~60~~ weeks)	~~$ 15,275.52~~ $ 14,851.20
j.	Mobilization and Demobilization	$ 2,500.00
		~~$ 370,365.50~~ $ 367,117.79
	5.1% Reclamation Management Cost	~~$ 18,888.64~~ $ 18,723.01
	10 pct contingency	~~$ 37,036.55~~ $ 36,711.78
	(1990 dollars)	~~$ 426,290.69~~ $ 422,552.58

Escalated Values	Escalation Factor
1991 - 431,705 427,919	1.27% (actual)
1992 - 441,245 437,376	2.21% (actual)
1993 - 452,453 448,485	2.54% (actual)
1994 - 461,547 457,500	2.01% (est)
1995 - 470,824 466,696	2.01% (est)
1996 - 480,288 476,076	2.01% (est)
1997 - 489,942 485,645	2.01% (est)
1998 - 499,789 495,407	2.01% (est)
1999 - 509,835 505,365	2.01% (est)
2000 - 520,083 515,522	2.01% (est)

~~Bond will be posted in accordance with R645-301-820.~~
A bond in the amount of $525,000 was posted on July 31, 1995.

Hiawatha Bin

Approx. 20 ft x 20 ft high bin (½ in plate with stiffeners, tapers down at bottom) with (4) 12 in I-beams (30 ft legs) and angles for cross bracing.

Cut into pieces and load in dumpster. Assume average thickness of bin w/stiffeners, etc. equal to ⅝ in plate.
Cut each side 3 places and each leg twice.
Approx cut length= (3 cuts)(4 sides)(20 ft)+(2 cuts)(4 legs)(32in/12) = 261.3 ft

020-730-0010 (Torch Cutting, 1 in Plate)
Equivalent length (For 1 in plate) = (⅝)(261.3 ft) = 163.3 ft
Cutting cost = (0.923)(2.65/ft)(163.3 ft) = $399.42
Cutting time = 163.3 ft/(95 ft/day) = 1.72 days/3 crews = 0.57 days

Assume each piece takes 10 min. average to load in dumpster with crane after cutting.
Number of pieces = 12 plates + 4 legs = 16 pieces
Crane Time = 16(.17 hr) = 2.72 hrs

Labor = (2 men)(2.72 hrs)($15.83/hr)	$ 86.12
Crane + operator = (2.72 hrs)($78.25/hr)	$ 212.84
	$ 298.96

Time = 0.34 days

020-554-5200 (Reinforced Concrete)
Wall Volume = (60 ft)(6 ft)(1ft) = 360 cu ft
Footing Volume = (4)(3 ft)(3 ft)(1 ft) = 33 cu ft
Volume = 360 + 33 = 393 cu ft/27 = 14.56 cu yd
Cost = (0.923)(86.00/cu yd)(14.56 cu yd) = $1,155.74
Time = 14.56 cu yd/(25 cu yd/day) = 0.58 days

020-554-5000 (Plain Concrete)
Slab Volume = (30 ft)(30 ft)(8/12) = 600 cu ft/27 = 22.22 cu yd
Cost = (0.923)(47.80/cu yd)(22.22 cu yd) = $980.33
Time = 22.22 cu yd/(45 cu yd/day) = 0.49 days

020-554-5550 (Concrete Disposal on Site)
Volume = 14.56 + 22.22 = 36.78 cu yd
Cost = (0.923)(4.64/cu yd/(232 cu yd/day) = 0.16 days

Cost Subtotal	$2,991.97
Time Subtotal	2.14 days

Lump Coal Bin

Approx. 30 ft x 36 ft x 20 ft high bin (½ in plate with leg/stiffeners around outside, tapers down at bottom). Cut into pieces and load in dumpster. Assume average thickness of bin with stiffeners, etc. equal to ⅝ in plates.
Cut 2 Sides 4 places and 2 sides 5 places.
Approx. cut length = (4 cuts)(2 sides)(20 ft) + (5 cuts)(2 sides)(20 ft)= 360 ft

020-730-0010 (Torch Cutting, 1 Plate)
Equivalent length (for 1 in plate) = (⅝)(360 ft) = 225 ft
Cutting cost = (0.923)(2.65/ft)(225 ft) = $550.34
Cutting time = 225 ft/(95 ft/day) = 2.37 days/3 crews = 0.79 days

Assuming each piece takes 10 min. average to load in dumpster with crane after cutting.
Number of pieces = 18 plates + 8 legs = 26 pieces
Crane Time = 26(0.17 hrs) = 4.42 hrs

Labor = (2 men)(4.42 hrs)($15.83/hr)	$ 139.94
Crane + operator = (4.42 hrs)($78.25/hr)	$ 345.87
	$ 485.81

Time = 0.55 days

020-554-5200 (Reinforced Concrete)
Footing Volume = [2(36ft) + 30 ft](2ft)(1ft) = 204 cu ft/27 = 7.56 cu yd
Cost = (0.923)(86.00/cu yd)(7.56/cu yd) = $600.10
Time = 7.56 cu yd/(25 ft/day) = 0.30 days

020-554-5550 (Concrete Disposal on Site)
Volume = 7.56 cu yd
Cost = (0.923)(4.64/cu yd)(7.56/cu yd) = $32.38
Time = 7.56/cu yd/(232 cu yd/day) = 0.03 days

Cost Subtotal	$1,668.63
Time Subtotal	1.67 days

Coal Recovery Bin Foundation

~~Approx. dimensions:~~
~~Down Hill Side = 40 ft x 30 ft high~~
~~Two Other Sides = 60 ft x 35 ft (Average, Sloped)~~
~~½ in plate w/stiffeners~~
~~Assume average thickness w/ stiffeners equal to ⅝ in plate.~~
~~Cut into pieces and load in dumpster.~~
~~Cut down hill side (5+1) places and other sides (8+1) places.~~
~~Approx. Cut length:~~
~~Down hill side = (5 cuts)(30 ft) + (1 Cut)(40 ft) = 190 ft~~
~~Two other sides =2 sides [(8 cuts)(35ft) + (1 cut)(60ft)]= 680 ft~~
~~Total = 190 ft + 680 ft = 870 ft~~

~~020-730-0010 (Torch Cutting, 1 in Plate)~~
~~Equivalent length (for 1 in plate) = 5/8(870 ft) = 544 ft~~
~~Cutting Cost = (0.923)(2.65/ft)(544 ft) = $1,330.60~~
~~Cutting Time = 544 ft/(95 ft/day)= 5.73 days/3 crews = 1.91 days~~

~~Assume ea. piece takes 10 min. average to load in dumpster with crane after cutting.~~
~~Number of pieces =(2)(5 plates) + (2 sides)(2)(8 plates)= 42 pieces~~
~~Crane Time = 42(0.17 hr) = 7.14 hrs~~

~~Labor = (2 men)(7.14 hrs)($15.83/hr) =~~	~~$ 226.05~~
~~Crane + operator = (7.14 hrs)($78.25/hr) =~~	~~$ 558.71~~
	~~$ 784.76~~

~~Time = 0.89 days~~

020-554-5200 (Reinforced Concrete)

~~Footing Volume = (2.5 ft)(1 ft)[40ft + 2(60ft)] = 400 cu ft/27 = 14.8 cu yd~~

Volume = (2.5 ft)(1 ft)(12 ft)(4) + (12 ft)(12 ft)(0.33 ft)
= 167.52 cu ft/27 = 6.2 cu yd

Cost = (0.923)(86.00/cu yd)(~~14.8~~ 6.2 cu yd) = ~~$1,174.79~~ $492.14

Time = ~~14.8~~ 6.2 cu yd/(25 cu yd/day) = ~~0.59~~ 0.25 days

020-554-5550 (Concrete Disposal on Site)

Volume = ~~14.8~~ 6.2 cu yd

Cost = (0.923)((6.64/cu yd)(~~14.8~~ 6.2 cu yd) = $~~63.38~~38.00

Time = ~~14.8~~ 6.2 cu yd/(232 cu yd/day) = ~~0.06~~ 0.03 days

Cost Subtotal $~~3,353.53~~ 530.14
Time Subtotal ~~3.45~~ 0.28 days

Slack Bin

Approx. 12 ft x 12 ft high bin (½ in plate with stiffeners, tapers down at bottom) with (4) 8 in I-beams X 30 ft legs and angle cross bracing.
Cut legs off at bottom and load on truck.
Assume average thickness of elgs, etc. equal to ⅜ in plate.
Approx cut length = (4 legs)(24 in) = 8 ft.

020-730-0010 (Torch Cutting, 1 in Plate)

Equivalent length (for 1 in plate) = (⅜)(8 ft) = 3 ft
Cutting Cost = (0.923)(2.65/ft)(3 ft) = $7.34
Cutting Time = 3 ft/(95 ft/day) = 0.03 days

Assume it takes 1 hr to load the bin on truck with crane after cutting legs.

Labor = (2 men)(1 hrs)($15.83/hr) = $ 31.66
Crane + operator = (1 hr)($78.25/hr) = $ 78.25
$ 109.91

Time = 0.13 days

020-554-5200 (Reinforced Concrete)

Footing Volume = 4(2.5ft)(2.5ft)(1ft) = (25 cu ft/27 = 0.93 cu yd
Cost = (0.923)(86.00/cu yd)(0.93 cu yd) = $73.82
Time = (0.93 cu yd)(25 cu yd/day) = 0.04 days

020-554-5000 (Plain Concrete)

Slab Volume = (12ft)(16ft)(4/12) = 64 cu ft/27 = 2.37 cu yd
Cost = (0.923)(47.80/cu yd)(2.37 cu yd) = $104.56
Time = 2.37 cu yd/(45 cu yd/day) = 0.05 days

020-554-5550 (Concrete Disposal on Site)

Volume = 0.93 + 2.37 = 3.3 cu yd
Cost = (0.923)(4.64/cu yd)(3.3 cu yd) = $14.13
Time = 3.3 cu yd/(232 cu yd/day) = 0.01 days

Cost Subtotal $309.76
Time Subtotal 0.26 days

Cost Subtotal $7,406.55
Time Subtotal 7.53 days

Building Enclosure for Tank Seam Belt Portal

020-604-0500 (Steel Building, includes disposal)
Volume = (12 ft)(12 ft)(12 ft) = 1,728 cu ft
Cost = (0.923)(0.16/cu ft)(1,728 cu ft) = $255.19
Time = 1,728 cu ft/(14,800 cu ft/day) = 0.12 days

Cost Subtotal $255.19
Time Subtotal 0.12 days

Remove Structures Cost Total = ~~$66,639.36~~ 63,815.97
Remove Structures Time Total = ~~41.5~~ 38.3 days

e. Revegetation

Drill Seeding (Section 9.5) 16 acres x $891.00/acre	$14,256.00
Hydroseeding (Section 9.5) 9.7 acres x $1,667.00/acre	$16,169.90
Riparian Area Planting (Section 9.5) 1 acre x $2,210.00/acre	$ 2,210.00
Install Matting (Section 9.5) 3.7 acres x $3,103.75/acre	$11,483.88
Cost Total	$44,119.78

f. Monitor Well Plugging

Approx. 4 in diam x 40 ft deep	
1 yds cement @ $51.00/yd	$ 51.00
4 hrs labor @ $15.83/hr	$ 63.32
Cost Total	$ 114.32

g. Maintenance and/or Monitoring for Vegetation, Erosion, and Subsidence

(Bond for 10-year bond liability period)

Vegetation - field survey, sampling, analysis and report writing @ $1,000.000/day + $80.00/day vehicle expense (Mt. Nebo Scientific), 3 days/yr	$3,240.00/yr
Erosion - 1 day to field survey @ $141.44/day	141.44/yr
Subsidence 2 day field survey @ $141.44/day 1 day certified surveyor @ $250/day	532.88/yr
Subtotal	$3,914.32/yr
Cost Total — 10 yrs x $3,914.32 =	$39,143.20

h. Hydrology Monitoring, Quarterly

Labor - 4 days annually @ $126.64/day	$ 506.56/yr
Laboratory work - per Commercial Testing and Engineering Co. Huntington, Utah ($87.73/sample)(7 samples) - $614.11/quarter x 4	2,456.44/yr
Subtotal	$2,963.00/yr
Cost Total — 10 yrs x $2,963.00 =	$29,630.00

i. Supervision - 21.60 weeks @ $707.20/week ~~$15,275.52~~ $14,851.20

j. Mobilization and Demobilization of 5 pieces of equipment @ $500 each $ 2,500.00

The above listed costs include reclamation costs added between 1985 and the latest modification.

EXISTING STRUCTURES

Table 3A-1 lists each structure and construction dates. Reclamation is expected in 2014.

Table 3A-1 Existing Structures

Existing Structure	Construction Dates Starting	Completion	Photo #
Fuel Tanks	10/83	6/84	2
Truck Loading Facility	9/82	4/83	3
Shop - Bathhouse - Warehouse	10/83	9/84	4
Added Machine Shop	11/89	12/89	5
Oil Slack Loading Facility	4/83	7/83	3
Storage & Stacking Facility	6/80	4/84	3
Coal Processing Facility	4/80	12/85	6
Non-Coal Storage Yard	3/80	9/84	7
Transformer Sub-Station	4/80	6/80	8
Conveyor Structures	3/80	6/80	3
Cross Conveyor	7/89	9/89	9
Sales Receiving-Scale Office	6/84	10/87 (Phase I) 10/92 (Phase II)	Fig 3A-1 1
Coal Storage Bins	4/857	10/857	11
Powder Magazine	9/82	containerized	7
Lump Coal Facility	10/83	12/85	6
Water Tanks & System	8/82	11/82	13
Mine Fan	9/82	11/82	14
Lump Coal Storage Pad	8/92	10/92	15
Equipment Wash Pad	8/92	10/92	16
Shower House	5/93	7/94	17
Antifreeze Storage Tank	12/93	1/94	18
Tank Seam Fan	7/94	8/94	19
Tank Seam Borehole Structure	7/94	8/94	20

10. Conveyor Structures. These conveyors are the route by which the coal exits the mine to the storage piles and loadouts. Photo #3 pictures the conveyors and load out facilities from below.

Cross Conveyor. In order to reduce problems encountered with the use of the Coal Recovery bin (i.e. fires and coal fine movement) a cross-over belt from the Blind Canyon Seam conveyor to the Hiawatha Seam conveyor was installed in 1989, bypassing the bin. See Photo #9.

11. REMOVED

12. Caretakers Residence. There is not a caretakers Residence in the Permit area at the Present time.

13. Coal ~~Recovery~~ Storage Bin. ~~As the name implies, is approx 50 ft X 100 ft bin where coal fall from the conveyor chute~~ Consists of 20 ft X 20 ft surge bin to receive coal from the ~~underground conveyors~~ prior to traveling to the crusher. ~~is pictured in~~ See Photo #11. ~~- To be removed -~~

14. Powder Magazine. Consists of a storage shed. See Photo #7.

15. Lump Coal Facility. Consists of storage bin & loading conveyor. See Photo #6.

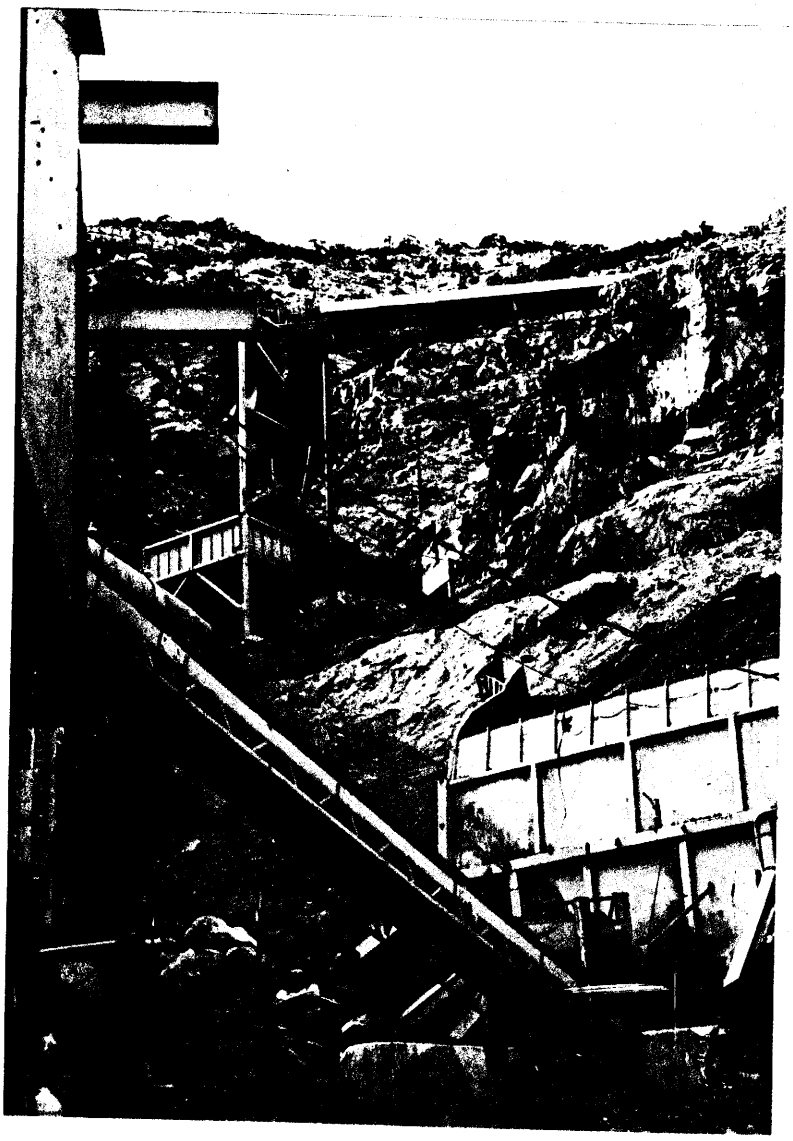

Photo #11 Coal ~~Recovery~~ Storage Bin

Removed

Photo #12