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Top width of dams are not less than $(H + 35)/5$.

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2.4-1 General Notes

The primary settling basins (formerly Pond B) are located above Pond "C". A disturbed area of 9.42 acres drain into the settling basins as shown on Plate 8. These basins collect sediment and runoff from this area; however, since they are a series of cells, any overflow from the basins will be cleaned and go into Pond "C".

It is proposed that 18" culverts be added between cells B-1 and B-2, and between B-2 and B-3. An 18" culvert already exists between cells B-3 and B-4. These culverts will prevent breaching of the dikes between cells during major runoff events. The inflow to the basins is from culverts CD-12 and CD-13, which is a total of 2.79 cfs, as shown on Table IV-3C. Based on the Manning's Equation for culverts (p.169-C), the required diameter to carry a flow of 2.79 cfs is only 0.95 feet; therefore, the 18" culvert overflows are more than adequate to pass the design flow. The placement of the culverts will not affect the maximum water levels or sediment storage capacity of the basins.

The basins are cleaned when sediment accumulations reach 50% of the original volume. The original volume was 0.540 acre feet, and the sediment cleanout level (0.270 acre feet) is at the culvert inlet level between cells B-2 and B-1 as shown on certified Plate 11.

Revised 03/05/92
Revised 11/11/93

PERMIT CHANGE TRACKING FORM

DATE RECEIVED	11/18/93	PERMIT NUMBER	ACT/002/019
Title of Proposal:	Overflow Culverts	PERMIT CHANGE #	93F
Description:	PERMITTEE	Andalex Resources	
	MINE NAME	Centennial	

<input type="checkbox"/> 15 DAY INITIAL RESPONSE TO PERMIT CHANGE APPLICATION <input type="checkbox"/> Notice of Review Status of proposed permit change sent to the Permittee. <input type="checkbox"/> Request additional review copies prior to Division/Other Agency review. <input type="checkbox"/> Notice of Approval of Publication. (If change is a Significant Revision.) <input type="checkbox"/> Notice of request to modify proposed permit change prior to approval.	DATE DUE	DATE DONE	RESULT
		11/19/93	<input checked="" type="checkbox"/> ACCEPTED
			Permit Change Classification <input type="checkbox"/> Significant Permit Revision <input checked="" type="checkbox"/> Permit Amendment <input type="checkbox"/> Incidental Boundary Change

REVIEW TRACKING	INITIAL REVIEW		MODIFIED REVIEW		FINAL REVIEW AND FINDINGS	
DOGM REVIEWER	DUE	DONE	DUE	DONE	DUE	DONE
<input type="checkbox"/> Administrative						
<input type="checkbox"/> Biology						
<input type="checkbox"/> Engineering						
<input type="checkbox"/> Geology						
<input type="checkbox"/> Soils						
<input type="checkbox"/> Hydrology	Steve	12/17/93				
<input type="checkbox"/> Bonding						
<input type="checkbox"/> AVS Check						

COORDINATED REVIEWS	DUE	DONE	DUE	DONE	DUE	DONE
<input type="checkbox"/> OSMRE						
<input type="checkbox"/> US Forest Service						
<input type="checkbox"/> Bureau of Land Management						
<input type="checkbox"/> US Fish and Wildlife Service						
<input type="checkbox"/> US National Parks Service						
<input type="checkbox"/> UT Environmental Quality						
<input type="checkbox"/> UT Water Resources						
<input type="checkbox"/> UT Water Rights						
<input type="checkbox"/> UT Wildlife Resources						
<input type="checkbox"/> UT State History						
<input type="checkbox"/> Other						

<input type="checkbox"/> Public Notice/Comment/Hearing Complete (If the permit change is a Significant Revision) <input type="checkbox"/> Copies of permit change marked and ready for MRP. <input type="checkbox"/> Special Conditions/Stipulations written for approval. <input type="checkbox"/> TA and CHIA modified as required. <input type="checkbox"/> Permit Change Approval Form ready for approval.	<input type="checkbox"/> Permit Change Approval Form signed and approved effective as of this date. <input type="checkbox"/> Permit Change Denied. <input type="checkbox"/> Notice of <input type="checkbox"/> Approval <input type="checkbox"/> Denial to Permittee. <input type="checkbox"/> Copy of Approved Permit Change to File. <input type="checkbox"/> Copy of Approved Permit Change to Permittee. <input type="checkbox"/> Copies to Other Agencies and Price Field Office.
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APPLICATION FOR PERMIT CHANGE

Title of Change: *Addition of Overflow Culverts in Catch Basin "B".*

Permit Number: *ACT1 0071019*

Mine: *CENTENNIAL MINE*

Permittee: *ANDALEX RESOURCES*

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

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

Michael W. Hamann Sr. Geol. 11/15/93
Signed - Name - Position - Date

Subscribed and sworn to before me this 15 day of Nov. 19 93
Jana K. O'Hearon
Notary Public
My Commission Expires: July 22, 19 97
Attest: STATE OF _____
COUNTY OF _____



Notary Public
JANA K. O'HEARON
830 North 100 East
Price, Utah 84501
My Commission Expires
July 22, 1997
State of Utah

Received by Oil, Gas & Mining

NOV 18 1993

DIVISION OF
OIL, GAS & MINING

ASSIGNED PERMIT CHANGE NUMBER

Application for Permit Change Detailed Schedule of Changes to the Permit

Title of Change: *Addition of overflow culverts
in Catch Basin "B."*

Permit Number: *ACT/007 1019*

Mine: *CENTENNIAL MINE*

Permittee: *ANDALEX RESOURCES*

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

page # 137 ~~138~~ ~~139~~

ADD REPLACE REMOVE

photo 11

ADD REPLACE REMOVE

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

APPLICATION FOR PERMIT CHANGE

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Michael W. Hann Sr. Geol. 11/15/93
Signed - Name - Position - Date

Subscribed and sworn to before me this 15 day of Nov., 19 93.

My Commission Expires: _____
Attest: STATE OF _____
COUNTY OF _____

Notary Public

Jonas D. Pearson
July 22, 19 93
Utah
Carson



JOHN K. GIBSON
620 Main Street
P.O. Box 1000
Salt Lake City, Utah 84101
My Commission Expires
July 22, 1993
State of Utah

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