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

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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

December 22, 1992

Dan Bauer, Plant Manager
Akzo Salt of Utah
1428 James Palmer Road
Lake Point, Utah 84074

Dear Mr. Bauer

Re: Review of Notice of Intent to Conduct Large Mining Operations, AKZO Salt of Utah, Timpie Solar Ponds, M/045/030, Tooele County, Utah

The Division has completed its evaluation of your latest (June 30, 1992) response to our April 28, 1992, permit review of AKZO's original Large Mining Operation NOI. The additional information satisfies most of the outstanding issues identified in our initial review of Akzo's permit application. Listed below, are areas of concern which still require further clarification. Our comments are listed under the applicable Minerals Rule heading. Please format your response in a similar fashion.

General Comments

In response to your comment regarding the change in rule numbers, the Minerals Rules were re-numbered with the "R647" prefix, to comply with a recent State Directive. All State regulations/rules must now conform with a new standardized, uniform code. The content of the rules was not altered, only the numbering.

R647-4-106 Operation Plan

106.5 Existing soil types, location, amount

The Division will allow some of the roads designated in plots A, B, C and D, to remain for post-mine use. However, we question whether ***all*** the roads proposed to remain, will truly be required after cessation of mining activities. Only those roads with a lawful and verifiable post-mine utility should be left after mining. All others need to be reclaimed. Please re-evaluate your

proposal and indicate to the Division which roads will meet this test and which ones will not. Perhaps a site visit or round table discussion would help to identify these areas.

AKZO's plan for removing salt from salt saturated soil in plot C is acceptable. However, AKZO will be held to the 70% revegetation standard. If this removal method proves unsuccessful, AKZO may be required to import topsoil from the proposed borrow area(s). (HWS)

R647-4-107 Operation Practices

107.3 Erosion control & sediment control

The Division previously requested information regarding the control measures implemented by the operator to minimize erosion and control sediment from the disturbed areas (principally main processing/loadout facilities areas). AKZO's latest response ***may*** be adequate, however, a supplemental onsite evaluation will be required to confirm and clarify our understanding of the description provided by the operator. (DWH)

107.4 Deleterious material safely stored or removed

The Division has requested information regarding how surface drainage is controlled in the salt storage/processing/loadout areas to minimize potential offsite salt contamination from storm runoff. Again, AKZO's latest response ***may*** be adequate, however, an onsite evaluation will be required to clarify our understanding of the controls described in the permit application. (DWH)

Weather permitting, we would like to schedule the onsite inspection during January or early February 1993. We will contact you to arrange a acceptable time and date.

R647-4-110 Reclamation Plan

110.5 Revegetation planting program

AKZO's proposed seed list is acceptable. However, the rates for each species needs to be designated. We suggest the following:

Grasses

Common Name	Scientific Name	lbs/Acre
Crested wheatgrass	Agropyron cristatum	3
Alkali sacaton	Sporobolus airoides	1
Bluebunch wheatgrass	Agropyron spicatum	3
Indian ricegrass	Oryzopsis hymenoides	4

Forbs

Yellow sweetclover	Melilotus officinalis	3

Trees and Shrubs

Fourwing saltbush	Atriplex canescens	3
Rabbitbrush	Chrysothamnus nauseous	2
Sagebrush	Artemisia tridentata	2
	Total lbs/acre = 21	

Seed Application & Seedbed preparation

This seed application rate is developed for broadcast seeding. If drill-seeding is proposed, then this application rate should be decreased by 35%.

Please ensure that the soil has been loosened sufficiently before seeding, by discing or harrowing (to at least a 6-inch depth). Where the soil has become extremely compacted, resulting from heavy equipment usage, the soil will need to be deep ripped (to at least 18 inches), before seeding.

The seed should be applied in the fall, before the first hard freeze. This should occur before the end of November. (HWS)

R647-4-112 Variance

The Division will grant a variance for the facility area with the Exception of plot C and any other portions of this area (i.e., roads, pads, buildings, etc.) to be earmarked for future reclamation, based on the outcome of an onsite inspection to be conducted in the near future.

R647-4-113 Surety

The Division is prepared to issue its tentative approval of this permit application as soon as AKZO provides us with the proposed form and amount of reclamation surety and a completed Reclamation Contract (FORM MR-RC). The Division has prepared a reclamation cost estimate for the Timpie Solar Ponds operation which is attached for your review. If this reclamation estimate is acceptable, please notify us at your earliest convenience of AKZO's preferred *form* of reclamation surety. We will then send you the appropriate surety form. A copy of a Reclamation Contract (FORM MR-RC) agreement is attached along with an interpretive guideline to assist you in completing this form. (AAG)

R647-4-116 Public Notice & Appeals

Upon our receipt of AKZO's draft form of surety and the reclamation contract agreement, the Division will proceed to issue its tentative approval and publish notice of a 30-day public comment period. After the successful expiration of the public comment period, the Division will seek approval of the amount and form of surety from the Board of Oil, Gas & Mining during a regularly scheduled monthly Board Hearing. (AAG)

Thank you for your continued cooperation and efforts in completing this permitting action. Please contact me or Tony Gallegos if you have any questions or concerns regarding the content of this letter.

Sincerely,

D. Wayne Hedberg

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachment
cc: Lowell Braxton, DOGM
Minerals staff (route)
M045030.rvw

RECLAMATION ESTIMATE DRAFT

Akzo Salt of Utah last revision 12/04/92

Timpie Solar Ponds Tooele County

M/045/030

Prepared by Utah State Division of Oil, Gas & Mining

Reclamation Details

-All dikes to erode naturally without regrading
-North dike(s) to remain to protect I-80 from flooding
-Dikes protecting Timpie Waterfowl Area to remain in place
-All wooden gates to be left open & erode naturally
-Two concrete gates to be removed
-Vehicle maintenance facility to have a post mine use{Plot A}
-Warehouse, offices & their access roads to have a post mine use{Plot B}
-Stacker conveyor and salt stockpiles to be reclaimed{Plot C}
-Salt washing plant and unloading ramps to be reclaimed{Plot D}
-Roads to be reclaimed by regrading and reseeding{Plot F}
-Substation not included in Akzo's reclamation plan{Plot E}
-Refer to map received 6/30/92 for "Plot" descriptions
-Total disturbed acreage (ponds & dikes not included) = 39.3
-Total plant disturbance to be reclaimed = 30.0

Description	Amount		$/unit	$
Open all gates *	24	gates	16	384
Remove concrete gates *	2	gates	700	1,400
Demo/remove wash plant *	1	sum	20,500	20,500
Demo/remove stacker *	1	sum	22,800	22,800
Rip & remove stockpile *	1	sum	26,800	26,800
Grade disturbed area	30	acre	325	9,750
Reseed disturbed area	30	acre	260	7,800
Mobilization	4	equip	1,000	4,000
	subtotal			93,434
Add 10% contingency				9,343
	Total in 1992 $			102,777
	Escalation for 5 years @ 1.27%			6,694
	Total in 1997 $			109,472
	Rounded total in 1997 $			$109,500

Average cost/disturbed acre = $2,786

'*' indicates estimate by Akzo