

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

ORDER NO. 88-133

As Amended By:  
STATE WATER RESOURCES CONTROL BOARD  
ORDER NO. WQ 89-17

REVISED WASTE DISCHARGE REQUIREMENTS

for

AZUSA LAND RECLAMATION COMPANY, INC.  
(AZUSA LAND RECLAMATION LANDFILL)  
(File No. 59-102)

The California Regional Water Quality Control Board, Los Angeles Region finds:

1. Azusa Land Reclamation Company, Inc. (hereinafter ALR) discharges nonhazardous and inert wastes under waste discharge requirements contained in Resolution No. 60-22 and Order No. 86-59, adopted by this Regional Board on February 11, 1960 and July 28, 1986 respectively.

2. ALR, owned by American Sheds, Inc., a subsidiary of Browning-Ferris Industries, Inc., has filed a Report of Waste Discharge (ROWD) and supplementary information with this Board for the continued operation and expansion of Azusa Land Reclamation Landfill located at 1201 West Gladstone Street, Azusa, California. The ROWD requests revised waste discharge requirements for the disposal to land of nonhazardous solid and inert wastes at the existing landfill within the boundaries of the site previously designated for nonhazardous and inert waste disposal in Resolution No. 60-22. Pursuant to this Board's Order No. 86-59, however, disposal of nonhazardous solid wastes has been temporarily limited to the area of current disposal as delineated in Order No. 86-59, pending submission and approval of plans and specifications for the remainder of the site which comply with applicable requirements of Title 23, Chapter 3, Subchapter 15, California Code of Regulations (hereinafter referred to as Subchapter 15).

Amended October 3, 1989

3. ALR filed their original ROWD in several steps beginning December 8, 1986, and ending August 10, 1987. At a public hearing March 28, 1988, the Board adopted a motion denying the tentative waste discharge requirements as proposed in ALR's original ROWD. At its meeting on May 23, 1988, the Board adopted Resolution No. 88-006 supporting its previous action. ALR filed a revised ROWD beginning June 10, 1988. In a letter dated August 23, 1988, staff informed ALR that their ROWD was complete. After adoption of Order No. 88-133, the Main San Gabriel Basin Watermaster filed a petition for review with the State Water Resources Control Board (State Board). During its consideration of this petition, the State Board requested ALR to provide additional information regarding a ground water barrier system. ALR provided such information and also proposed to limit waste disposal to the 355-foot elevation and to fund remedial cleanup efforts in the San Gabriel Basin.

4. The ALR Landfill is a 302-acre site located in the central part of the San Gabriel Valley within the cities of Azusa and Irwindale. The site is approximately one mile south of the Foothill Freeway (210) and 2.5 miles east of the San Gabriel River Freeway (605). The landfill operation is in an active sand and gravel quarry operated by Transmix Corp. (dba Transit Mixed Concrete Company). Landfill operations are scheduled to commence subsequent to the completion of mining in these leased sections of the property. Approximately 80 acres of the total site have nonhazardous solid wastes currently in place, and about 13.6 acres contain only inert waste. The remainder of the site is either completely or partially mined or undisturbed acreage.

5. The site has a remaining capacity of approximately 38.6 million tons of nonhazardous solid wastes and inert wastes. At an average disposal rate of 4,500 to 6,000 tons per day, the site will reach capacity in about 20.6 years, resulting in a projected closure date of 2009.

6. Geologically, the landfill is located on the debris cone of the San Gabriel River between the river and Little Dalton Wash. The site is underlain by Holocene alluvium derived from the San Gabriel Mountains to the north. Very coarse sand, gravel, cobbles and boulders are characteristic of the alluvium. Only minor amounts of silt and clay are present. The material is highly permeable and will transmit water readily. These geologic materials do not meet the permeability standard of less than  $1 \times 10^{-6}$  cm/sec required for Class III landfills; therefore, lining of new areas will be required.

7. There are no known active (or Holocene) faults within the landfill area. The nearest active fault is the Raymond Fault located 5 miles northwest of the landfill. An Alquist-Priolo Special Studies Zone has been established on the Raymond Fault. The Duarte, Upper Duarte, and Sierra Madre Faults are located 1/2 mile, 1 mile, and 2 miles north of the landfill property, respectively. These faults are considered potentially active. Alquist-Priolo study zones have not been established on these potentially active faults.

8. The landfill lies within the Main San Gabriel Hydrologic Subarea, groundwaters of which are beneficially used for municipal, industrial, and agricultural water supply. The site is located 2 miles east of the San Gabriel River and Santa Fe Spreading Grounds which are important recharge areas for the basin. The direction of groundwater flow beneath the site is influenced by managed water spreading activities in these areas.

9. The landfill is not within a 100 year floodplain.

10. The historic high ground water elevation at the site was about elevation 345-feet above Mean Sea Level (MSL), occurring in 1944. The discharger had proposed in its ROWD that disposal be permitted to an elevation of 330 feet MSL. During the State Board's review of this matter, the discharger modified this proposal to 355 feet MSL. Subchapter 15, Section 2530(c), requires that landfills be operated to ensure that wastes will be a minimum of five feet above the highest anticipated elevation of underlying ground water. Even though there have been changes in basin development and management practices since 1944, there is a reasonable likelihood that ground water elevations could reach or exceed 325 feet. Given this likelihood, the landfill expansion must be designed, constructed, and operated to ensure adequate separation between the wastes and ground water.

11. The current revision of Subchapter 15, which became effective November 27, 1984, contains very specific construction, monitoring and operation standards for new landfills, or expansions of existing landfills. The Board has received a conceptual plan and supplemental information submitted by the discharger as required by Article 9 of Subchapter 15 which describe measures that will satisfy the requirements in Subchapter 15. The State Board, during its consideration of the petition from Watermaster received further conceptual plans and information from the discharger which describe additional measures to satisfy the requirements in Subchapter 15. These plans satisfy the requirements in Subchapter 15, Section 2510, regarding engineered alternatives to Subchapter 15. ALR

also submitted proposals to the State Board agreeing to fund \$20 million in cleanup projects in the Basin and to limit waste disposal to the 355-foot elevation.

12. The proposed future Class III disposal area consists of three areas for proposed future disposal: the transition area, the first fully lined area, and the balance of the undeveloped area of the site. These areas will encompass approximately 220 acres and extend from a low elevation of 355 feet MSL to a proposed high elevation of about 580 feet MSL. The final elevation will permit the development of a 3% slope to native elevations to assure adequate runoff of precipitation on the site.

13. The Conceptual Plan and supplemental information propose the construction of a transition zone between the current active fill area and the first fully lined area. From a toe at an approximate elevation of 355 feet MSL, the base of the proposed transition zone will slope upward to the south at a 6 percent grade to an upper elevation of approximately 400 feet MSL. The transition zone will be 9.6 acres and formed by the removal and relocation of a portion of the in-place inert fill materials from the existing 13.6 acres of inert fill area. The surface of the proposed transition zone will be covered by a 12-inch layer of compacted silt material derived from onsite sand and gravel operations, a 12-inch layer of gravel (1 inch maximum in diameter) placed above the compacted silt layer, and a 6-inch layer of select soil will be placed on top of the gravel layer for surface protection prior to any disposal of wastes. The toe of the proposed transition zone will join the first fully lined area of 16 acres. The liner system will slope at 3 percent toward leachate collection sumps proposed to be installed at elevation 330<sup>1</sup> feet MSL.

14. The major improvement in the new ROWD is in the revised liner system. ALR now proposes to place a 80-mil HDPE (High Density Polyethylene) liner over, and in addition to, the previously proposed clay liner. The liner system will consist of eight different layers placed on top the prepared ground surface. The first layer will be 6 inches of compacted fine soil. The second layer will be 12 inches of compacted clay materials with a permeability of  $1 \times 10^{-6}$  cm/sec or less. The third layer will be the 80-mil HDPE liner. The fourth layer will be a 6-inch protective layer for the clay and HDPE materials consisting of compacted fine soil. The fifth layer will be a geotextile membrane as a separator

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<sup>1</sup> 355 feet MSL in the revised proposal presented to the State Water Resources Control Board.

from the protective layer and the gravel drain above. The sixth layer will be 12 inches of gravel acting as a drainage layer (Leachate Collection and Removal System, LCRS). This blanket LCRS will have a minimum permeability of  $10^{-2}$  cm/sec. The seventh layer will be a second geotextile membrane to separate the gravel from the operational buffer layer. The last and eighth layer will be 6 inches of selected soil placed on top of the geotextile membrane to protect the liner from the equipment traffic on the disposal area. Conceptual plans for additional liner systems were submitted by the discharger in connection with the State Board's review of Watermaster's petition. A ground water barrier system was submitted. The ground water barrier would be installed outside the liner system approved by the Regional Board and would consist of four layers: A layer of 60 mil HDPE on top of a six-inch prepared subgrade layer. On top of the 60 mil HDPE would be a "geonet" drainage layer and a geotextile layer. The ground water barrier would follow the slope of the liner up to an elevation of 370 feet and would include a separate drainage system. During the State Board's consideration of Watermaster's petition, ALR also agreed to two additional measures: limiting waste disposal to the 355-foot level and funding \$20 million in cleanup projects in the San Gabriel Basin.

15. Side slope protection will be provided. The general makeup of this system will be a series of overlapping sand and gravel-covered, low permeability "shingles" and a synthetic membrane placed on these side slopes.

16. Monitoring devices for the vadose (unsaturated) zone will be installed beneath the liner system in accordance with Section 2559 of Subchapter 15 prior to any disposal of wastes.

17. The design and features of the first fully lined area including liner, leachate collection and removal system, and exterior side slope protection, as described in the conceptual plan and supplemental information, are proposed by ALR, as common design elements for additional phases in the remaining undeveloped areas of the site. Vadose zone monitoring systems will also be installed in the remaining areas together with liners.

18. The proposed transition zone area and the first lined area meet and exceed the criteria and the guidelines of the State Water Resources Control Board or equivalent protection standards for classification as a Class III disposal site to receive nonhazardous solid wastes and inert wastes.

19. ALR developed and implemented a compliance monitoring program beginning in August 1984, which included the installation of three new monitoring wells and the use of two existing upgradient water supply wells. All results of this monitoring program have been reported to this Board, and the discharger is currently monitoring these wells on a quarterly basis. These results have shown the presence in upgradient and downgradient groundwater of chlorinated organic solvents, including tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, and associated chemical species that may be degradation products of these compounds. These results fail to identify the landfill as the sole source of these pollutants.

20. At the direction of this Board's Executive Officer, the discharger instituted and completed a verification monitoring program in 1986 that included installation of two wells in existing landfill areas containing nonhazardous solid wastes. Analysis of samples of trapped pockets of liquids encountered in the refuse showed no detectable levels of the chlorinated organic solvents observed in the groundwater monitoring program. In July 1986, the discharger developed and submitted to Board Staff a five-point plan to remove and treat liquids encountered within the landfill, depending upon construction and use of a proposed on-site treatment plant to treat landfill gas condensate and leachate. By letter dated October 10, 1986, this Board's Staff conceptually approved the proposed five-point plan. The discharger has completed a pilot plant study for design of the on-site treatment plant as described in the five-point plan and the complete design and operation plan of the treatment plant are expected to be submitted by the discharger to the Board in the near future.

21. Approximately 60 gas recovery wells have been installed for the collection of landfill gas for sale to nearby industrial users. This system will be expanded as the landfill is developed in order to relieve internal pressure, minimize the possibilities of onsite emissions and to utilize the landfill gas recovered for industrial application. Additional landfill gas collection wells and associated equipment are subject to permit requirements administered by the South Coast Air Quality Management District.

22. The Board adopted a revised Water Quality Control Plan for the Los Angeles River Basin on November 27, 1978. The Water Quality Control Plan contains water quality objectives for Main San Gabriel Hydrologic Subarea. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

23. On November 9, 1960, the City of Azusa adopted Resolution No. 164 granting a Conditional Use Permit to Azusa Rock and Sand Company (now Azusa Land Reclamation Company) to operate a "public refuse disposal site." This was an amendment of an Agreement between the City of Azusa and the property owners originally dated March 16, 1953. The Conditional Use Permit was to expire on January 1, 1975. In 1974, ALR requested authorization to continue operation of a public refuse disposal site and an Environmental Impact Report was prepared for the Azusa portion of the site (280-acre site) in December 1974. This report was accepted by the Azusa City Planning Commission and a Conditional Use Permit (C-151) was granted on April 9, 1975. The Conditional Use Permit is now incorporated into Owner Participation No. 1, dated January 27, 1984.

24. In November 1973, the City of Irwindale adopted a Conditional Use Permit for Southwestern Portland Cement Company to excavate the 20 acres portion of the site (in Irwindale) for rock and sand. In July 1980, ALR entered into a stipulated judgement with the City of Irwindale which authorizes use of the site as a Class III sanitary landfill for a 30-year period beginning January 1, 1984. An Environmental Impact Report was prepared for the Irwindale portion of the site in April 1981. The EIR was accepted by the Irwindale City Council on January 24, 1985. Also, an EIR for a Landfill Gas Compressor Station and Piping System from the Azusa Western Sanitary Landfill to Selected Customers was accepted by the Azusa City Council on September 8, 1976.

25. Nevertheless, the issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (California Environmental Quality Act) since this is an ongoing project in accordance with the California Code of Regulations, Title 14, Chapter 3, Section 15261(b).

The Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that the Azusa Land Reclamation Company, Inc. shall comply with the following:

A. ACCEPTABLE MATERIALS

1. Azusa Land Reclamation Landfill is a Class III landfill.
2. Wastes disposed of at this site shall be limited to nonhazardous solid wastes and inert solid wastes.
3. Nonhazardous solid waste means all putrescible and nonputrescible solid, and semi-solid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded solid or semi-solid waste; provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state (i.e., designated waste).

B. WATER QUALITY PROTECTION STANDARDS

1. In accordance with Section 2552 of Subchapter 15, the following water quality protection standards are established for this facility:

<u>Parameter</u>	<u>Units</u>	<u>Maximum Value</u>
Total Dissolved Solids	mg/l	600
Sulfate	mg/l	100
Chloride	mg/l	100
Boron	mg/l	0.5
Total Organic Halogens	mg/l	0.5
Carbon Tetrachloride	ug/l	5.0
Perchloroethylene (PCE)	ug/l	4.0
Trichloroethylene (TCE)	ug/l	5.0
Vinyl Chloride	ug/l	2.0



2. Water quality protection standards may be modified by the Board based on more recent or complete ground water and/or vadose zone monitoring data, changes in background water quality and/or background soil-pore liquid quality, or for any other valid reason.

3. The compliance point(s) where the water quality protection standards shall apply shall be at the downgradient edge of the waste management area.

4. The discharger shall use the statistical procedures contained in Subchapter 15, Section 2555(h) to determine if there is a statistically significant increase above upgradient monitoring wells and/or background soil-pore samples for any indicator parameter. Upon approval of the Executive Officer, alternative statistical procedures may be used.

5. In the event a statistically significant increase above annual average background concentration is observed for any indicator parameter in the downgradient monitoring wells and/or in the downgradient soil-pore samples, the discharger shall establish a verification program in accordance with Section 2557 and/or Section 2559 of Subchapter 15.

6. The discharger shall institute a corrective action monitoring program if representative analyses of the ground water and/or soil-pore samples show a statistically significant increase above annual average background concentration in any water quality protection standard in downgradient wells and/or in downgradient soil-pore samples in accordance with Section 2558 and Section 2559 of Subchapter 15.

7. The compliance period for which the water quality protection standards are applicable shall be the entire active life of the site and during the closure and post-closure maintenance periods.

#### C. PROHIBITIONS

1. No designated or hazardous wastes like liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids such as salts, borax, lye, caustic, or acids shall be deposited at this site.

2. No materials which are of a toxic nature, such as insecticides, or poisons, shall be deposited at this site.

3. No hazardous (or special wastes) or radioactive wastes shall be disposed of at this site. However, asbestos, if handled in the manner prescribed by the State Department of Health Services, may be disposed of at this site.
4. No wastes other than inert wastes shall be placed below elevation 355 feet MSL, USGS datum.
5. The discharge of wastes or waste byproducts to natural surface drainage courses or to ground water is prohibited.
6. No infectious materials and hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal, and human disease, shall be disposed of at this site.
7. No pesticide containers shall be disposed of at this site unless they are rendered nonhazardous by triple rinsing.
8. No septic tank pumpage or chemical toilet wastes shall be disposed of at this site.
9. No water shall be used at this site except for landscape irrigation, for road surface dust control and fire fighting. Water used for irrigation of disposal areas shall be applied only on completed lifts in quantities not to exceed those necessary to support plant life and shall be confined to the irrigated areas. The ponding of irrigation water because of excessive watering is prohibited.
10. Washing of landfill equipment shall be confined to areas where the wastewater will not percolate into the landfill. Washwater from the washing of refuse or other waste hauling vehicles shall not be permitted to enter the storm water collection system.
11. Except for unadulterated tap water, any waters used for landscape irrigation, dust control or other non-emergency uses, shall be subject to waste discharge requirements.
12. No surface waters shall leave this site except as permitted by a National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with the Federal Clean Water Act and the California Water Code (CWC).
13. The gas collection system at this waste management unit and any proposed system expansion shall be designed so that gas condensate is not returned to the landfill.

D. GENERAL REQUIREMENTS FOR DISPOSAL OF WASTES

1. There shall be no damage to the community by odors or unsightliness resulting from unreasonable practices in the disposal of wastes at this site, such that it would create a nuisance as defined in Section 13050(m) of the CWC.
2. Neither the disposal nor handling of wastes at this site shall create pollution as defined in Section 13050(1) of the CWC.
3. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements. The Board shall be informed within 7 days in writing when relocation of wastes is necessary. The source and final disposition (and location) of the wastes shall also be reported.
4. Wastes deposited at this site shall be confined thereto, and shall not be permitted to blow off the site or to enter offsite storm water drainage ditches or watercourses.
5. Adequate measures shall be taken to prevent a condition of nuisance from fly breeding, rodent harborage, and other vectors.
6. The migration of gases from the disposal site shall be controlled as necessary to prevent water pollution or nuisance.
7. Any abandoned water wells under the control of the site owner or operator and situated within the influence of the site must be located and properly modified or sealed to prevent vertical movement of any water within the well bore. A notice of intent to decommission a water well must be filed with appropriate regulatory agencies prior to decommissionment. Procedures used to destroy these wells or modify wells still in use should conform to the specification of the local health department or other applicable agencies.
8. In any area within the transition zone, the lined areas, or other areas in the landfill where seepage water is observed, provisions shall be made and/or facilities shall be provided to insure that seep water will not come in contact with decomposable refuse in this waste management unit. The location of all springs and seeps found during, prior to, or after placement of waste material that could affect this waste management unit shall be reported to the board.

9. Construction standards for containment structures shall comply with Article 4 of Subchapter 15. Construction standards for containment structures within the transition zone shall provide for equivalent protection. Any exceptions to these standards must fully meet the standards in Section 2510, parts (b) and (c) of the regulations and be approved by the Executive Officer.

10. Leachate collection and removal systems at this site shall comply with Subchapter 15, Section 2543. The discharger shall have sufficient replacement parts so that in case of failure of any part of the systems, no adverse water quality effects will result.

11. All leachate from this waste management unit shall be intercepted, and pumped out when detected, and properly disposed of.

12. All wastes shall be adequately covered at the end of the operating day.

13. Precipitation and drainage controls, structures, and facilities at this site shall comply with Subchapter 15, Section 2546.

14. The waste management area shall be graded and maintained to promote proper runoff of precipitation and to prevent ponding of storm water.

15. Erosion or washout of deposited materials by surface flow shall be prevented.

16. This site shall be designed to withstand the maximum probable earthquake without damage to the facilities or structures which control leachate, surface drainage, or gas collection systems, or erosion control systems.

17. Regional Board staff shall be allowed entry to the landfill or where records are kept regarding the landfill at any reasonable time. Staff shall be permitted to inspect any area of the landfill and any monitoring equipment used to demonstrate compliance with this Order. Staff shall be permitted to copy any records, photograph any area, obtain samples, and/or monitor to assure compliance with this Order, or as authorized by the CWC.

18. The landfill expansion shall be designed, constructed, and operated to provide adequate separation between waste and waters of the state.

E. WATER QUALITY MONITORING

1. The discharger shall furnish, under penalty of perjury, technical monitoring reports in accordance with Section 13267 CWC. Failure or refusal to furnish these reports, or falsifying any information provided therein makes the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 CWC. Monitoring reports shall be submitted in accordance with the specifications contained in a Monitoring and Reporting Program prepared by the Executive Officer. This Monitoring and Reporting Program is subjected to periodic revisions as warranted.

2. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained for the active life of this site. If any of these wells and/or monitoring devices are damaged, destroyed or abandoned for any reason, the discharger shall provide a substitute to meet the monitoring requirements of this Order. For the purpose of this requirement, "active life" shall mean the entire period during which waste material will be deposited at the site plus the closure and post-closure maintenance periods.

3. The discharger shall submit within 60 days after adoption of this Order detailed plans and equipment specifications for the proposed additional groundwater monitoring wells and monitoring devices for vadose zone for compliance with the monitoring requirements of Article 5 of Subchapter 15. The discharger shall provide technical reports which includes rationale for the spatial distribution of ground water monitoring facilities (wells or piezometers, etc.) and vadose zone monitoring devices, for the design of monitoring points, and for the selection of other monitoring equipment. This report shall be accompanied by:

a. A map showing the locations of the proposed monitoring facilities; and

b. Drawings and data showing construction details of proposed monitoring facilities. These data shall include the following as appropriate:

- ✓(i) casing and bore hole diameters;
- ✓(ii) casing materials (PVC, stainless steel, etc.);
- ✓(iii) depth of each hole;
- ✓(iv) size and position of perforations;
- ✓(v) method of joining the sections of the casing;
- ✓(vi) nature of filter material;

- ✓(vii) depth and composition of seals; and
- (viii) method and length of time of well development.

Any new or replacement monitoring wells or piezometers installed in the future will require a similar technical report prior to installation.

4. The discharger shall ensure that all of the monitoring wells, piezometers, and vadose zone monitoring devices are in proper operating order at all times. The discharger shall have a Monitoring Well and Vadose Zone Monitoring Device Preventative Maintenance Program approved by the Executive Officer. Elements of the Program shall include at the least periodic visual inspections of the well integrity, pump removal and inspection, periodic checking of vadose zone monitoring devices, etc., plus appropriate inspection frequencies. If a well, piezometer, or a vadose zone monitoring device is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within seven days after such discovery. When the Board is so informed, the notification shall contain a time schedule for returning the well, piezometer, or the vadose zone monitoring device to operating order. The initial Monitoring Well and Vadose Zone Monitoring Device Preventive Maintenance Program will be due to the Board within 60 days after the adoption of this Order. Changes to the Program shall be submitted for Executive Officer approval at least 30 days prior to implementing the change(s).

5. The discharger shall provide for the proper handling and disposal of water purged from the wells during sampling. Water pumped from the wells shall not be returned to that (or any other) well unless appropriate waste discharge requirements have been prescribed, nor shall it be used for dust control or irrigation without waste discharge requirements.

#### F. PROVISIONS

1. A proposal for a periodic waste load checking program shall be submitted for Executive Officer approval within 60 days after adoption of this Order. After approval, the program shall be implemented to ensure that unauthorized hazardous materials, designated wastes, or other unauthorized materials are not deposited at this site.

2. Interim cover is daily cover and intermediate cover as defined by the California Waste Management Board. Interim cover over wastes discharged to this landfill shall be designed and

constructed to minimize percolation of precipitation through wastes and contact with material deposited. To this end, ponding of liquids over deposited wastes is prohibited.

3. This site shall comply with all applicable provisions, requirements, and procedures contained in the most recent revision of the California Code of Regulations, Title 23, Chapter 3, Subchapter 15, "Discharge of Waste to Land," and any amendments thereto.

4. This site shall have containment structures or physical barriers which are capable of preventing degradation of waters of the state as a result of wastes (or their byproducts such as leachate or landfill gas) discharged to this landfill.

5. This site shall be fitted with liners and leachate collection and removal systems which comply with Subchapter 15 in all new areas of operation.

6. In the lined area, inert waste which underlie any liner shall be placed so that it forms a dense (90% compaction) stable mass. Large voids shall be prevented and no bulky material which is not readily compactable shall be placed in this fill zone.

7. The following general criteria for containment structures are applicable to this site:

a. Materials used in containment structures shall have appropriate chemical and physical properties to ensure that such structures do not fail to contain waste because of pressure gradients (including hydraulic head and external hydrogeologic forces), physical contact with the waste or leachate, chemical reactions with soil and rock, climatic conditions, the stress of installation, and the stress of daily operation.

b. Permeabilities specified for containment structures other than cover shall be relative to the fluids, including waste and leachate, to be contained. Permeabilities specified for final cover shall be relative to water.

c. Permeabilities shall be determined primarily by appropriate field test methods in accordance with accepted civil engineering practice. The results of laboratory tests with both water and leachate, and field tests with water, shall be compared to evaluate how the field permeabilities will be affected by leachate. Appropriate compaction tests may be

used in conjunction with laboratory permeability tests to determine field permeabilities as long as a reasonable number of field permeability tests are also conducted.

d. Containment structures shall be designed by, and construction shall be supervised and certified by, a registered civil engineer or a certified engineering geologist, certified or registered in the State of California. Facilities shall receive a final inspection and approval of the construction by Regional Board or State Board staff before use of the facility commences.

e. The integrity of containment structures shall be maintained. Excavations made as part of discharge operations shall not result in removal of any portion of a containment structure.

f. Any report submitted under this section or any amendment or revisions thereto which might affect containment features or monitoring systems shall be approved by a registered engineer or a certified engineering geologist.

g. Containment structures shall have a permeability of  $1 \times 10^{-6}$  cm/sec or less and shall be suitably compacted to not less than 90 percent relative density at optimum moisture content. Results of permeability and compaction tests shall be reported for review to the Board and other interested agencies prior to disposal in the area relevant to the structures.

h. The liner, leachate collection, ground water barrier system and side slope protection systems shall be constructed according to the design specifications furnished to this Board by the discharger. Any deviation from these design specifications is subject to the Executive Officer's review and approval prior to any construction.

8. The discharger shall submit within 60 days after adoption of this Order an operation plan describing the landfill operation which shall include:

a. A description of current or proposed treatment, storage, and disposal methods;

b. Contingency plans for the failure or breakdown of waste handling facilities or containment systems which could have any potential water quality effects, including notice of any such failure, or any detection of waste or leachate in



monitoring facilities, to the regional board, local governments, and water users downgradient of the landfill; and

c. A description of inspection and maintenance programs which will be undertaken regularly during disposal operations, the closure, and the post-closure maintenance period of facilities or equipment which could have any potential water quality effects.

9. The discharger shall submit detailed preliminary and as-built plans, specifications, and descriptions for all liners, containment structures, leachate collection and removal system components, leak detection system components, precipitation and drainage control facilities, and interim covers which will be installed or used at the site. The discharger shall submit a description of and location data for ancillary facilities including roads, waste handling areas, buildings, and equipment cleaning facilities. These plans, specifications, etc., shall be updated as the site is expanded and completed. Preliminary plans and specifications shall be submitted at least 60 days prior to construction and as-built plans and specifications shall be submitted within 30 days after completion of construction. If the preliminary plans and specifications and as-built plans and specifications are virtually identical, only change sheets need be submitted in lieu of complete as-built plans and specifications. The discharger shall submit detailed preliminary and as-built plans, specifications, and descriptions for the ground water barrier system required by State Board Order No. WQ 89-17. These materials shall be submitted in accordance with a schedule established by the Executive Officer.

10. The discharger shall notify the Regional Board of changes in information submitted in the Report of Waste Discharge and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged; or site operations and features. The discharger shall notify the Regional Board 120 days before the changes are made or become effective.

11. The discharger shall notify the Regional Board in writing of any proposed change of ownership or responsibility for construction, operation, closure, or post-closure maintenance of this facility. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing waste discharge requirements and any revisions thereof.

12. The Regional Board shall be notified by telephone within 24 hours and in writing within seven days of any slope failure occurring at the landfill. Any failure which threatens the integrity of containment structures shall be promptly corrected after approval of a corrective action plan and time schedule by the Executive Officer.

13. The Regional Board shall be notified in writing within seven days if fluid is detected in a previously dry leachate detection system, a leachate collection and removal system, or if a progressive increase in the liquid volume is detected in the leachate collection and removal system.

14. The Regional Board shall be notified of any incident resulting from site operations that may endanger health or the environment by telephone within 24 hours and in writing within seven days. The written notification shall fully describe the incident including what occurred, when it occurred, the duration of the incident, when correction occurred (or when correction will occur if it is a continuing incident), and the steps taken or planned to reduce, eliminate, and/or prevent recurrence.

15. The discharger shall submit final Closure and Post Closure Maintenance Plans to the Board at least 240 days prior to closure (unless this requirements is less stringent than laws or regulations adopted regarding Closure and Post Closure Plans adopted for other regulatory agencies).

16. The owner or operator of this facility shall notify the Regional Board in writing at least 180 days prior to the beginning of final closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with all applicable federal and state regulations. In the event closure and post-closure maintenance plans have not been submitted for this waste management area, they shall accompany this notice.

17. The owner or operator of this facility shall notify the Regional Board within 30 days after the completion of final closure activities that closure has been completed. The discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with all applicable regulations. The discharger shall certify that all closed waste management units shall be maintained in accordance with an approved post-closure maintenance plan(s).

18. In case of violation of compaction and/or clay liner requirements, the discharger shall cease the deposition of nonhazardous solid and inert wastes, and remove or relocate all deposited wastes to enable inspection by Board staff.

19. All State, County and City sanitary health codes, rules, regulations and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of this waste disposal site.

20. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

21. This Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge and from gases and leachate that may be caused by infiltration of precipitation or drainage waters into the waste disposal areas or by infiltration of water applied to this property during subsequent use of the land for other purposes.

22. These requirements do not exempt the operator of this waste disposal facility from compliance with any other law which may be applicable. The requirements are not a permit; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes.

23. Bench marks shall be established and maintained at the site in sufficient number to enable reference to key elevations and to permit control of critical grading and compaction operations.

24. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the operators from his liabilities under federal, state, or local laws.

25. The operators must comply with all of the terms, requirements and conditions of this Order. Any violation of this Order constitutes a violation of the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof.

26. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

- a. Violation of any term or condition contained in this Order;
- b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized waste discharge.

27. The filing of a request by the operators for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirement of this Order.

28. This Order does not convey any property rights of any sort, or any exclusive privilege.

29. The operators shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The operator shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

30. Approval of this Order is contingent on ALR complying with State Board Order No. WQ 89-17 requirements regarding (a) the ground water barrier system, (b) limiting waste disposal to 355 feet MSL, and (c) funding \$20 million in cleanup projects in the Basin.

G. RESCISSION

Resolution No. 60-22 and Order No. 86-59 adopted by this Board on February 11, 1960 and July 28, 1986, respectively, are hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on November 28, 1988, and amended by the State Water Resources Control Board on October 3, 1989.

*Robert P. Ghirelli*

ROBERT P. GHIRELLI, D.Env.  
Executive Officer