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Quality Control
Board**

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**Pete Wilson
Governor**

January 7, 1997

Mr. Donald R. Owen
Secretary to the Board
Mesa Community Services District
P.O. Box 221
Bishop, CA 93515

**UPDATE ON STATUS OF MESA COMMUNITY SERVICES DISTRICT
MEMORANDUM OF UNDERSTANDING (MOU) AND WASTEWATER
MANAGEMENT PLAN (WMP)**

Thank you for your December 17, 1996, letter updating Regional Board staff on the status of the sand filter cleaning. The letter states that seven of the eight sand filters were cleaned and wirebrushed by the Triad/Holmes Association.

We also understand that attorney Fred Marr will be retained as your legal advisor as of December 16, 1996.

Please contact Tammy Lundquist at (916) 542-5420 should you have any questions regarding the MOU and/or the WMP agreement.

Sincerely,

Ranjit S. Gill, Ph.D., Chief
Planning and Toxics Unit

cc: Robert Kennedy, Inyo County Environmental Health Services

TML/le/t:stat.let
[Mustang Mesa CSD]



Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MEETING OF SEPTEMBER 5 AND 6, 1996
Bishop

ITEM: 21

SUBJECT: STATUS REPORT ON COMPLIANCE WITH THE MEMORANDUM OF UNDERSTANDING AND WASTEWATER MANAGEMENT PLAN - INYO COUNTY AND MUSTANG MESA COMMUNITY SERVICES DISTRICT

CHRONOLOGY: May 1991: Regional Board conditionally rescinds the septic system prohibitions for the Mesa.

Aug. 1993: Regional Board authorizes signing of the Memorandum of Understanding (MOU) between Inyo County, the Regional Board, and the Mesa Community Services District.

Sept. 1993: MOU, which assigns responsibilities for implementing the WMP, is signed by the three parties.

DISCUSSION: The use of individual on-site wastewater disposal (septic) systems, and their potential impact on ground water in the Mustang Mesa/Alta Vista (Mesa) area has been a long-standing issue. In 1975, the Regional Board adopted two Basin Plan amendments, prohibiting new septic systems in the Mesa and requiring the development of an alternative sewage disposal system to replace the existing septic systems.

For over a decade, efforts by the Mesa homeowners and the Regional Board to find an agreeable alternative wastewater disposal system were unsuccessful. Finally, Inyo County (County) joined the effort and proposed to develop and implement a Wastewater Management Plan (WMP) which would enable continued use of septic systems and which would assure ground water protection at the Mesa.

Based on the promise by the County and the Mesa homeowners to develop and implement the WMP, the Regional Board rescinded the two prohibitions in May, 1991.

In September 1993, the County and the Mesa CSD entered into a Memorandum of Understanding (MOU) with the Regional Board. The MOU clearly assigned to both the County and Mesa CSD their responsibilities in implementing the WMP. From June 1991-1992 Regional Board staff works with the Mesa CSD and Inyo County to develop a Wastewater Management Plan (WMP) to comply with the Regional Board's conditions.

The County agreed to issue permits, verify design specifications, and inspect the siting and construction of the new septic systems. The Mesa CSD agreed to establish local authority to implement and carry out all requirements of the WMP, including water quality monitoring, and the development and implementation of enforcement procedures for non-complying property owners. In addition, the County and the Mesa CSD agreed to maintain records of construction permits and monitoring data. This data was to be submitted to the Regional Board in annual reports.

Regional Board staff believe that neither the County nor the Mesa CSD has made a diligent effort to comply with the provisions of the WMP, as agreed to in the MOU. Therefore, Regional Board staff have prepared the enclosed Status Report, giving a more detailed accounting of the commitments made by the County and the Mesa CSD, and their lack of progress in meeting those commitments. The attached status report also includes a discussion of what Staff believe that the County and Mesa CSD must do at this time to achieve satisfactory compliance with the WMP and MOU.

Regional Board staff have made numerous attempts to obtain information from the County to help prepare the most up-to-date status report. However, due to other commitments, the County provided very little information for this report.

RECOMMENDATION:

Staff recommends that the Regional Board obtain a written commitment from the County and the Mesa CSD, by the October 1996 Regional Board meeting, to carry out the compliance activities outlined on pages 5 and 6 of the enclosed Status Report.

If the County and/or the Mesa CSD either refuses to sign such an agreement, or fails to carry out the agreed upon compliance activities, the Regional Board should consider further action such as, but not limited to, rescinding the MOU, prohibiting new septic systems at the Mesa, and reinstating the 1975 prohibitions.

Enclosure:

Status Report

TML/sh

STATUS REPORT ON MESA COMMUNITY SERVICES DISTRICT

BACKGROUND

In 1964, the Regional Board adopted waste discharge requirements (WDRs) for the development of Mesa Vista Estates (Mesa), 10 miles northwest of Bishop, on the east side of Highway 395. The WDRs were for a proposed sewage collection, treatment and disposal system to serve 300 persons. In 1967, Inyo County (County) approved four tracts within the subdivision. Development within the subdivision consisted of single family dwellings with septic tank/leachfield wastewater disposal systems.

The subdivision is situated over Bishop Tuff soils, which provide minimal protection for the underlying ground water, which is the domestic water supply for the Mesa. Due to this fact, and based on the findings of periodic compliance inspections, Board staff recommended, in 1975, that the Regional Board prohibit the further use of septic systems within the subdivision. In 1975, the Regional Board adopted two basin plan prohibitions. The first prohibited new development on septic systems within the subdivision. The second required that the Mesa discontinue the use of existing septic systems and develop an alternative sewage disposal system within ten years.

Following many discussions and meetings with the Mesa homeowners regarding the prohibitions, the Regional Board agreed to extend the compliance deadlines for the Mesa. The extension gave the homeowners additional time to evaluate acceptable wastewater disposal alternatives which would be protective of ground water.

Over the next 14 years, the Regional Board and the Mesa homeowners conducted various investigations and negotiations, in an effort to find an agreeable wastewater disposal alternative which would allow rescission of the prohibitions. The efforts proved unsuccessful, and, ultimately, the homeowners requested the County to assist in finding a solution to the problem.

Discussions between the Mesa property owners and staff of the Regional Board and the County led to the proposal of a wastewater management plan (WMP). The WMP was a compromise solution, in that it allowed continued use and new construction of individual septic systems, but it also required that numerous monitoring and maintenance measures be taken to ensure that ground water was being protected.

Based on progress in developing at the WMP, in 1991 the Regional Board adopted Resolution No. 6-91-42, rescinding the discharge prohibitions (see Attachment 1). In 1993, the Regional Board, the County, and the Mesa Community Services District (Mesa CSD) finalized a mutually agreeable WMP (see Attachment 2). On August 13, 1993, the three agencies entered into a memorandum of understanding (MOU) which clearly defined the responsibilities of each agency under the WMP (see Attachment 3).

In the three years since the signing of the MOU, the County and the Mesa CSD have made minimal progress in complying with the provisions of the WMP and the MOU. At this time, staff are providing the Board with a report of the status of compliance with those provisions.

CURRENT STATUS OF COMPLIANCE

The WMP and the MOU require that the following tasks be accomplished:

1. Permitting

The County is required to issue construction permits for new residential and commercial onsite wastewater disposal systems. The systems must comply with specifications included in the WMP. The County is responsible for regulating and inspecting the siting and construction of those systems.

Status: The County requires a construction application and filing fee for each new onsite wastewater disposal system, residential or commercial. We do not know if the County inspects siting and/or installation of those systems. Regional Board staff believe that only a few new wastewater disposal systems have been permitted since signing of the MOU in September 1993.

2. Maintenance

The Mesa CSD is required to perform routine maintenance on all onsite wastewater disposal systems which were constructed after the date of the MOU.

Status: The County believes that Mesa CSD is currently in the process of preparing a draft ordinance intended to address enforcement and system maintenance provisions. Neither Regional Board staff nor the County have seen this draft ordinance.

3. Monitoring

The Mesa CSD is responsible for implementing and performing ongoing monitoring activities, as specified in the WMP. Specifically, the following monitoring activities are required:

a. Effluent Monitoring

On an annual basis, the performance of the permitted "state of the art alternative wastewater disposal system designs" is to be monitored by sampling effluent before and after passage through the system. The number of systems to be monitored each year is either one system, or 10% of the systems installed in the past year, whichever is greater. Since July 1993, three rounds of sampling, involving a minimum of one system per round, should have been conducted.

Status: We understand that two rounds of effluent sampling have been conducted. One round was determined to be invalid because of improper sampling and/or analytical techniques. The valid round indicated a nearly 99% reduction in coliform, but only minimal reduction in the nitrate-nitrogen, after passage through the system.

b. Ground Water Monitoring

A ground water monitoring system of 6-9 domestic wells was to be identified, and those wells were to be sampled quarterly for the first year to establish background. Samples were to be analyzed for total and fecal coliforms and nitrate-nitrogen. In subsequent years, the wells were to be sampled semi-annually to observe water quality trends. Since July 1993, four rounds of background samples, and four rounds of trend monitoring samples should have been taken.

Status: We understand that two rounds of samples have been taken. One round was taken in January 1995, and the second was taken in January 1996. Some of those samples were determined to be invalid due to improper sampling locations and/or techniques. The four quarters of background samples were not taken. It will be difficult to establish a long-term trend without the background monitoring.

c. Public Health Monitoring

All existing and newly constructed private wells in the subdivision are required to be monitored, every four years, with 25% of the wells being monitored each year. Samples are to be analyzed for total coliform, fecal coliform, and nitrate-nitrogen. Since July 1993, approximately 48 samples should have been taken (there are currently 67 known wells in the subdivision).

Status: We understand that one round of public health samples has been taken. That round included samples from five wells. Unfortunately, as with the trend monitoring samples, results from the public health monitoring samples were inconclusive. Contamination resulting from a number of factors led Inyo County to invalidate some of the samples.

We understand that at this time, Mesa CSD and Inyo County have signed a long-term monitoring contract, whereby the County will conduct the required monitoring.

4. Enforcement

Mesa CSD was required to establish a local authority to implement and carry out all requirements of the WMP, and to create enforcement procedures and actions for non-complying property owners.

Status: As mentioned above, Inyo County believes that Mesa CSD is in the process of developing a draft maintenance and enforcement ordinance. Neither Regional Board staff nor the County have seen this draft ordinance.

5. Recordkeeping

The County and Mesa CSD were required to maintain records of all construction permits, well monitoring data, and wastewater disposal and monitoring data. In addition, the County and Mesa CSD were required to provide all agencies and property owners with annual reports of monitoring/maintenance/renovation activities.

Status: The County currently maintains the required records. Mesa CSD does not maintain any of those records. We do not know if the Mesa property owners or other agencies receive annual reports. The Regional Board has received annual reports only upon request.

6. Communication

Representatives of the County, Mesa CSD, and the Regional Board were expected to actively participate in review/update meetings, as necessary, to ensure that the WMP and MOU were being implemented and that they continued to be appropriate for safe, well-planned development in the subdivision, and protection of the ground water.

Status: No joint meetings have been conducted.

The above discussion demonstrates that the County and the Mesa CSD have not fully complied with the provisions of the WMP and the MOU. Although Regional Board staff do not know the exact number of new systems constructed at the Mesa, staff believe this number to be low. Therefore, it is unlikely that significant adverse water quality impacts have occurred at the Mesa due to non-compliance by the County and the Mesa CSD. Regional Board staff believe that if both parties agree to follow the compliance schedule described below, they will be able to resume the schedule initially agreed upon in the MOU within one year.

TASKS NECESSARY TO ACHIEVE ACCEPTABLE COMPLIANCE WITH THE PROVISIONS OF THE WMP AND THE MOU

1. Permitting

By October 1, 1996, the **County** should provide to Regional Board staff the following information:

- a. The number of new septic systems permitted since September 1993.
- b. Design specifications of the new permitted systems.
- c. The number of new septic systems actually installed or renovated at the Mesa since September 1993.
- d. Records of the County's inspections of the siting and construction of the new systems.

2. Maintenance

- a. By October 1, 1996, the **Mesa CSD** should finalize the ordinance intended to address enforcement and system maintenance provisions of the WMP.
- b. By November 1, 1996, the **Mesa CSD** should perform the required maintenance on all systems installed or renovated after September 1993.
- c. By November 15, 1996, the **Mesa CSD** should submit a written report to the County and Regional Board staff, certifying that the required maintenance has been performed.

3. Monitoring

a. Effluent Monitoring

- i. By November 1, 1996, the **Mesa CSD** should perform effluent monitoring on all systems installed or renovated after September 1993.
- ii. By November 15, 1996, the **Mesa CSD** should submit the results of effluent monitoring to the County and Regional Board staff.

b. Ground Water Monitoring

By October 1, 1996, the **Mesa CSD** should submit the information used to select each of the six to nine aquifer monitoring wells as specified in the WMP, for review and approval by the County and Regional Board staff.

If the selected wells are approved by the County and Regional Board staff for aquifer monitoring, the Mesa CSD shall commence the four quarterly monitoring events by starting the first sampling event before November 1, 1996. The Mesa CSD should submit the results of each quarterly aquifer monitoring event within 30 days after laboratory analysis, to the County and Regional Board staff.

If the County or Regional Board staff determine that the Mesa CSD has not identified the six to nine aquifer monitoring wells as specified in the WMP, the Mesa CSD should construct the additional monitoring wells by June 30, 1997. By July 30, 1997, the Mesa CSD should commence the four quarters of aquifer monitoring and submit the results of each quarterly monitoring event, within 30 days after laboratory analysis, to the County and Regional Board staff.

c. Public Health Monitoring

By October 15, 1996, the **Mesa CSD or its designee** should perform the public health monitoring, as specified in the WMP on one half of all existing private wells, and submit the monitoring results, within 30 days after laboratory analysis, to Regional Board staff.

By June 30, 1996, the **Mesa CSD or its designee** should perform the required public health monitoring on the remaining half of the existing private wells, and submit the monitoring results, within 30 days after laboratory analysis, to Regional Board staff.

4. Reports

Over the course of the next year, the above tasks will require the submittal of nine reports by Mesa CSD and one report by the County. Those reports shall be submitted when they are due, and should not require reminder letters/telephone calls from Regional Board staff.

RECOMMENDATION

Regional Board staff believe that based on the history of delays in compliance, we could suggest taking more drastic actions, such as those listed below. However, since very few systems have gone in since September 1993, we do not believe that significant impacts to water quality have occurred, and we believe that there is still time to correct the previous non-compliance. Therefore, at this time, we recommend that the Board request the County and Mesa CSD to perform the tasks listed above to come back into compliance.

If the County and Mesa CSD do not perform the above tasks in compliance with the above schedule, Regional Board staff will bring this item back before the Board, and recommend that the Board take further action such as, but not limited to, rescinding the MOU, prohibiting new septic systems, and reinstating the 1975 prohibitions.

- Attachments:
1. Resolution No. 6-91-42
 2. Wastewater Management Plan
 3. Memorandum of Understanding

Attachment 1

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

RESOLUTION NO. 6-91-42

Rescission of the Basin Plan Discharge Prohibition for
Alta Vista/Mesa Vista/Mustang Mesa Area
Inyo County

WHEREAS, the California Regional Water Quality Control Board, Lahontan Region, finds:

1. It is the responsibility of the Regional Board to regulate discharges of wastewater in order to prevent the degradation of water quality and to protect designated beneficial uses; and
2. The Water Quality Control Plan for the South Lahontan Basin (Basin Plan) contains two prohibitions on the discharge of waste in the area which includes the Alta Vista, Mesa Vista and Mustang Mesa subdivisions located approximately eight miles northwest of Bishop in Inyo County; and
3. The first prohibition states, in part, that the discharge of waste from leaching or percolation systems installed after May 15, 1975, is prohibited. An exemption from this prohibition may be granted by the Executive Officer after presentation by the proposed discharger of geologic and hydrologic evidence and an acceptable engineering design which sufficiently demonstrates that the use of the proposed leaching disposal system will not, by itself or in conjunction with the use of other systems in the area, result in a pollution or nuisance; and
4. Exemptions to this prohibition have been granted by the Regional Board's Executive Officer on a case-by-case basis. Special design and location criteria for the installations of the septic tank systems have been required. The exemptions have incorporated a condition prohibiting the discharge of waste after January 1, 1985. As a result, the discharge of wastewater from leaching or percolation systems installed after May 15, 1975 is currently in violation of one of the conditions of the exemptions; and
5. The second prohibition originally contained in the Basin Plan stated that the discharge of waste by individual leaching disposal systems is prohibited after January 1, 1985. However, the deadline was extended to January 1, 1989, by the Regional Board in Resolution No. 86-10, which was adopted on October 10, 1986, and approved by the State Board in March 1987; and

6. Routine sampling of water wells in the prohibition area after the adoption of Board Order No. 6-77-111 showed evidence of sporadic bacterial contamination in some wells. Bacterial contamination alters the quality of the waters of the state to a degree which unreasonably affects the water for beneficial uses; and
7. An increase in the number of conventional leaching or percolation systems in the area may result in pollution of the underlying groundwater and pose a risk to public health; and
8. An independent study to evaluate ground water quality within and adjacent to the Alta Vista/Mesa Vista/Mustang Mesa area was conducted under the direction of the State Water Resources Control Board and managed by Regional Board staff. The study showed sporadic bacterial contamination of some domestic wells; and
9. Following review of the independent study, the Regional Board directed staff to prepare a Basin Plan amendment rescinding the discharge prohibition, provided that newly installed disposal systems incorporate the treatment necessary to achieve compliance with water quality objectives and that Inyo County agree to accept the responsibility to monitor and regulate existing systems for ground water pollution problems; and
10. Inyo County has agreed, in a letter from the Environmental Health Director to the Regional Board's Executive Officer dated March 13, 1991, work with Mesa Community Services District in developing a Mustang Mesa Wastewater Management Plan; and
11. Inyo County has also agreed to serve as the lead agency in monitoring and regulating existing disposal systems for the possible pollution of groundwater beneath Alta Vista/Mesa Vista/Mustang Mesa; and
12. Inyo County has entered into the Septic Tank Memorandum of Understanding with the Regional Board authorizing them to issue construction permits for projects which utilize individual subsurface disposal systems without Regional Board approval provided specific conditions are met, including that such projects are not located within an existing waste discharge prohibition area; and
13. The Regional Board staff has prepared Environmental Documentation addressing possible environmental impacts of the proposed amendment. The Regional Board's Basin Planning program has been determined to be functionally equivalent to the California Environmental Quality Act (CEQA) process in accordance with Section 21080.5 of the Public Resources Code and Title 14 of the California Code of Regulations Section 15251(g); and

14. A Public Hearing was held on May 9, 1991 to inform the public about the proposed Basin Plan amendment, and to receive comments. The Regional Board has considered all written comments, and all testimony presented at the hearing; and
15. The California Department of Fish and Game has indicated that the proposed amendment complies with the California Endangered Species Act.

THEREFORE BE IT RESOLVED THAT:

1. The environmental document for the proposed amendment has been completed in compliance with the California Environmental Quality Act (CEQA) and the Regional Board has reviewed and considered the information in the Functional Equivalent Document (FED) prior to approving the basin plan amendment; and
2. The Environmental Documentation has identified potential environmental impacts and the Basin Plan amendment has incorporated measures to reduce potential impacts to less than significant levels; and
3. For the South Lahontan Basin Plan the following paragraphs, which were adopted pursuant to Regional Board Resolution 6-86-10, shall be deleted:
 - "4. The discharge of waste within the following described area from leaching disposal systems is prohibited if the system is installed:

After May 15, 1975:

- (a) The area east of Highway 395 and west of the Owens River included within the S/2, SE/4, Sec. 10; Sec. 14; E/2, Sec. 15; Sec. 22; Sec. 23; W/2, Sec. 24; Sec. 26; T6S, R31E, MDB&M. This is generally the area north-easterly of Highway 395 in the Round Valley area commonly referred to as Alta Vista, Mesa Vista, or Mustang Mesa.

An exemption to this prohibition may be granted by the Executive Officer after presentation by the proposed discharger of geologic and hydrologic evidence and an acceptable engineering design which sufficiently demonstrates that the use of the proposed leaching system will not, of itself or in conjunction with the use of other systems in the area, result in a pollution or nuisance."

- "5. The discharge of waste by individual leaching disposal systems within the following described area is prohibited:

After January 1, 1989:

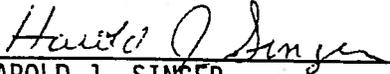
- (a) The area east of Highway 395 and west of the Owens River included within the S/2, SE/4, Sec. 10; Sec. 14; E/2, Sec. 15; Sec. 22; Sec. 23; W/2, Sec. 24; Sec. 26; T6S, R31E, MDB&M. This is generally the area north-easterly of Highway 395 in the Round Valley area commonly referred to as Alta Vista, Mesa Vista, or Mustang Mesa."

An exemption to this prohibition may be granted after presentation by the discharger of geologic and hydrologic evidence that the continued use of a leaching system will not, individually or collectively, result in a pollution or nuisance."

4. For consistency, item number 6 on page I-5-132 of the South Lahontan Basin Plan shall be renumbered 4; and
5. A copy of this resolution with other appropriate materials shall be submitted to the State Water Resources Control Board for approval; and
6. That upon approval of the amendment by the State Water Resources Control Board, the Regional Board shall file a Notice of Decision on the amendment with the State Clearinghouse, in accordance with Section 21080.5 of the California Environmental Quality Act (CEQA).

Certification

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Lahontan Region, on May 9, 1991.



HAROLD J. SINGER
EXECUTIVE OFFICER

Attachment 2

MUSTANG MESA WASTEWATER MANAGEMENT PLAN

JULY, 1993

Prepared by: Mesa Community Services District
Inyo County Environmental Health Department
California Regional Water Quality Control Board,
Lahontan Region

MUSTANG MESA WASTEWATER MANAGEMENT PLAN

A. BACKGROUND

In 1964, the Lahontan Regional Water Quality Control Board (LRWQCB) issued a wastewater discharge permit to Mr. Gordon Holmes for the proposed development of Mesa Vista Estates. As a result of this, Mr. Gordon Holmes submitted a proposed Tract Map to the County of Inyo for their review and action in 1967. After review by the Health and Planning Departments, the Inyo County Board of Supervisors voted to approve Alta Vista Estates Tracts 1 and 2 within the same year. From the period of 1967 to 1975 the Board of Supervisors approved the remaining 2 Tracts and the County Health and Building and Safety Departments issued building and wastewater disposal permits. In 1975 a member of the LRWQCB staff was conducting wastewater discharge permit inspections and in evaluating the Mustang Mesa Tracts it was the conclusion of the inspection that the Tracts were not consistent with the permit requirements. Therefore the LRWQCB took action by establishing 2 prohibitions on the Mustang Mesa Tracts. The first prohibition ordered that no more wastewater disposal permits shall be issued on the undeveloped lots, and the second prohibition ordered that the existing wastewater disposal permits be reversed. Obviously the local residents were very upset by this action and protested the LRWQCB's action. The result of many calls and public hearings was that the prohibition on the existing wastewater disposal permits would be extended so that the future disposal of wastewater on the Mesa could be studied.

There were 3 areas of study that were conducted on the Mesa. The first area was to evaluate the feasibility of future wastewater disposal on the Mesa and what methods would assure groundwater protection and which ones would be the most economical. The second area of investigation was for the LRWQCB's staff to prove that there had been pollution of the aquifer below the Mesa Tracts. The third area of investigation was to design a temporary on-site wastewater disposal system for any exempted new developments granted by the LRWQCB. The investigations by the LRWQCB concluded that conventional on-site wastewater disposal systems were not sufficient in treatment capabilities for the long term protection of the aquifer below the Mesa development. It was also determined that the most feasible system would be a community collection wastewater treatment plant. The LRWQCB felt that with the monitoring data and the results of the feasibility study and the backing of the Mesa Community Services District (MCS D) it was very possible that a grant to construct a community wastewater treatment plant could be approved by the California State

Water Resources Control Board (CSWRCB). However, these efforts were unrewarded and therefore the prohibitions still remained on the Mustang Mesa Community.

At the end of 1990 the MCSDB board requested help from the County to resolve this long term stand off between themselves and the LRWQCB. Inyo County Environmental Health Services (ICEHS) proceeded to meet with the MCSDB board to see what assistance the County could give. After listening to the present status of the prohibitions on the Mustang Mesa Community it was suggested by ICEHS that there might be a compromise that would satisfy both parties involved. ICEHS had been exposed to many alternative on-site wastewater disposal system designs that provide a much higher level of treatment than the conventional systems. This proposal was discussed with the MCSDB board and the Executive Director of the LRWQCB and it was agreed that this would be a positive direction to propose to the LRWQCB and if approved, a solution to a long standing stalemate. A major component of the compromise was that the MCSDB board, ICEHS staff, and a staff representative of the LRWQCB would convene as the Wastewater Management Plan Committee (WMPC) would compose a Wastewater Management Plan (WMP) for the entire Mesa Community Services District area. The Wastewater Management Plan would consist of, at a minimum:

- * specific alternative on-site wastewater system designs
- * monitoring program
- * hydrogeological evaluation
- * maintenance program
- * well construction requirements
- * existing well/septic renovation policy
- * financial responsibility
- * enforcement procedures
- * plan adoption process

So after presentation to the LRWQCB on January 9, 1991 at the Bishop City Council Chambers, the board approved the delegation of authority of monitoring and regulation to the ICEHS with the understanding that at a future date a complete WMP would be brought back to them for their review and action. Since that time the WMPC has been meeting and working on all components of the plan and as a result of this cooperative effort between three governmental agencies the following plan is complete and subject to the review of the Mesa Community Service District Board, Inyo County Board of Supervisors, LRWQCB, and the interested public.

B. PURPOSE

The WMP is a collaborative, established record between the LRWQCB, MCSDB, and the ICEHS that clearly outlines the environmental protections and community concerns as the Mustang Mesa Community Services District develops toward total build out. Assurances are built into this plan that provide a means of protecting the groundwater by routine monitoring and state of the art alternative wastewater disposal system designs of significant treatment standards. The plan also specifically outlines responsibilities for

alternative wastewater system installation, inspection, monitoring, and associated costs. Enforcement procedures and lead authority are also described thoroughly. Since the plan is required to be reviewed periodically, it has inherently built into it a sound overall purpose with given flexibilities.

C. SITE FEASIBILITY ANALYSIS FOR ALTERNATIVE WASTEWATER INDIVIDUAL SYSTEM DESIGN

The issue of whether alternative wastewater disposal (septic) systems could successfully be used at the Mesa is addressed by two technical reports. The "Mustang Mesa Ground Water Investigation" by Luhdorff & Scalmanini (Attachment 1) and the "Site Feasibility Analysis and On-Site Sewage Disposal System Design for the Mustang Mesa Community Services District" by Triad Engineering (Attachment 2).

As part of the WMP development process, ICEHS contracted with Luhdorff & Scalmanini, a consulting engineering firm in Woodland, California, to prepare a ground water investigation report (Attachment 1). The goal of this report was to analyze the local hydrogeologic conditions as they pertained to the protection of ground water resources from present and future septic system discharges at the Mesa. Hydrogeologic models employed in the report predicted the impacts of continued septic system use under numerous development and regulatory scenarios.

The results of the modeling was that the ground water system beneath the Mesa may receive discharges from all the currently existing lots in the subdivision, provided they use the designated sand filter septic systems, and not exceed the 10mg/l maximum contaminant level (MCL) for nitrate-nitrogen. The computer model of the ground water system did however project a level of ground water nitrate-nitrogen which appeared unacceptably high, (8.0 mg/l in 50 years) to Regional Board staff. This high number is attributed to what the report's authors admittedly called "... a rather conservative view of the area." ICEHS staff and the MCSD Board believe this assessment to be accurate for the following reasons:

1. The report notes that the 1988-89 ground water nitrate-nitrogen data gathered by a prior consultant is much lower than the concentrations predicted by the model. Specifically, the model predicts 4 mg/l of nitrate-nitrogen in ground water after approximately 10 years of discharge from all the existing homes on the Mesa. Conversely, the existing ground water data shows a nitrate-nitrogen concentration of 0.5 mg/l under the same approximate discharge scenario.

2. The model assumed that no denitrification, reduction of nitrate-nitrogen concentrations, took place prior to septic effluent reaching the ground water.

3. The model assumed that the build-out of existing, yet presently undeveloped lots on the Mesa occurs within one year, where actual development may take many years or even decades.

4. No water from precipitation at the Mesa is calculated to enter the ground water system. Any such precipitation reaching the ground water system would reduce nitrate-nitrogen concentrations.

As part of the WMP development process, the MCS D contracted with Triad Engineering of Mammoth Lakes, California to prepare a site feasibility analysis (Attachment 2) for the Mesa. The goal of this report was to analyze the feasibility of three different wastewater treatment systems at the Mesa and select the best one. The report analyzed the Clearwater Ecological package treatment system, recirculating gravel/sand filters and intermittent sand filters. All three systems met or exceeded ICEHS performance specifications for removal of total nitrogen, and five-day biological oxygen demand (BOD). The intermittent sand filter was therefore selected on the basis of initial cost and maintenance requirements.

D. REGISTERED CIVIL ENGINEER'S DETERMINATION OF BEST INDIVIDUAL ON-SITE SEWAGE DISPOSAL SYSTEM DESIGN FOR MUSTANG MESA COMMUNITY SERVICE DISTRICT
(see attachment B)

E. MONITORING PLAN

1. Effluent monitoring for new systems.

As stated in the Plan's Purpose, the use of "state of the art alternative wastewater disposal system designs of significant treatment standards" and routine ground water monitoring are the only ways to assure the WMPC that the ICEHS goals of treatment are being reached. By periodically obtaining effluent samples before and after the intermittent sand filter, one can evaluate what percentage of treatment is occurring. With proper maintenance and monitoring of these alternative wastewater systems, the WMPC can be assured that the goals and the groundwater are being properly protected.

The frequency of effluent monitoring will be annually and directed towards at least one new system per year or 10% of the total installations for that year, whichever number is greater. Systems will be chosen by the WMPC on the basis of the systems' size and daily projected flows. If possible the geographic location shall also be a consideration to obtain region wide coverage as in the aquifer monitoring that follows this section. Each year (time of year to be determined by ICEHS) all previously designated systems for monitoring and the present year's system(s) to monitor shall be sampled before and after the sand filter. All new alternative systems shall be equipped with sampling faucets before and after the sand filter. Analyses to be performed shall consist of a 5 day BOD and total nitrogen. Results of the analysis shall be mailed to MCS D and ICEHS for their review and records within 30 days after the analysis.

2. Groundwater Monitoring

a. Aquifer Monitoring

The long-term protection of the aquifer below the Mustang Mesa Community is an essential concern of the residents that live there as well as the LRWQCB and ICEHS for they are mandated to protect public health and the beneficial uses of California's water resources. In order to assure all parties involved or directly impacted by any degradation of water quality, the following long term monitoring plan shall be implemented upon approval of this WMP:

1. Monitoring shall be limited to a minimum of 6 and not to exceed 9 existing domestic wells. These wells shall be thoroughly evaluated on their location, construction, depth, use, age, etc., and in order for any of these evaluated domestic wells to be designated as the Mesa's long-term monitoring wells they must meet the following minimum requirements:

a. the designated well must have a submersible pump located at an acceptable depth of water column (which is properly screened at that zone) to accurately sample the upper 60 foot mixing zone of potential nitrate-nitrogen contamination

b. if possible the verification of an adequate sanitary seal to prevent the entrance of surface contamination

c. ability to take a water sample prior to water reaching the pressure tank

d. adequate geographic coverage of the Mesa

The selection of these specific wells shall be done by the WMPC and with approval from the well owner. If one or more monitoring locations on the Mesa cannot produce an existing domestic well that meets the above criteria within three years of the Plan's adoption, the MCSD shall initiate a workplan to construct the necessary amount of monitoring wells to fully cover all sampling regions of the Mesa. The three-year period is to allow the MCSD to reorganize under the WMP and gather the funds necessary to pay for the implementation of this Plan and any needed monitoring wells in the future. The MCSD would then have two years from the workplan submittal date to implement the workplan at their expense. At a minimum these constructed monitoring wells shall have a 50 foot seal.

2. The monitoring wells shall be located in a manner to achieve the representation of the entire Mesa Community Services District's boundaries and directional flow of the groundwater. Background levels shall be established from upgradient wells and determined on the basis that they themselves have not been polluted from upgradient sources beyond the districts' boundaries. However, any obvious degradation of upgradient wells may be factored into the determination of natural background levels.

3. Initially, these selected wells shall be sampled four times in the first year. The purpose of quarterly sampling in the first year is to establish a baseline nitrate-nitrogen mean (at the MCSD's expense) and total coliform/fecal coliform presence/absence (at the Regional Board's expense) for the Mesa. After the initial sampling year, the monitoring wells will be sampled semiannually for long term aquifer tracking.

In establishing a monitoring program on the Mesa it is important to consider all data available to determine if the mixing zone is becoming increasingly polluted from existing on-site sewage disposal systems. In evaluating existing data it is very important to determine how the data was obtained and how it will compare with this ongoing aquifer monitoring proposal.

4. After 5 years the WMPC shall review the present monitoring schedule and generated data to determine if any necessary changes need to be proposed for the aquifer monitoring program. Part of this review shall consider any potential impact on the public health or the aquifer that may be a result of maintaining, lessening, or increasing of the monitoring schedule and/or analysis. As stated in section B, Purpose, "the plan shall be reviewed periodically", which would be an appropriate time to address the present aquifer monitoring program.

b. Public Health Monitoring

The continued protection of public health and the water that we drink on a daily basis is definitely an ongoing concern of ICEHS and the MCSD. Because of the geology of the Mesa, the existing septic systems, the potential route of pollution through diagonal fissures in the tuff, and the inadequate protective seals on some of the wells, it is essential that a consistent monitoring of the private wells on the Mesa is conducted to assure that the drinking water quality standards are not exceeded for any of the private wells. Typically this is not done on individual private wells, but there lies a significant public health threat to the private residents of the Mesa if only the aquifer monitoring was conducted. Therefore the following public health monitoring plan is proposed:

1. All existing and newly constructed private wells shall be monitored once every 4 years, with 25% of the total wells on the Mesa being sampled each year.

2. All wells sampled shall be analyzed for total coliform/fecal coliform bacteria, and nitrate-nitrogen.

3 a. If sample results indicate that total coliform and fecal coliform bacteria levels are absent and nitrate-nitrogen levels are less than or equal to 5.0 mg/l for each individual well, then the following shall be conducted. Return to normal sampling schedule, provide sample results to the owner of the well, MCSD, and ICEHS within 30 days after laboratory analysis, and annually report the sample results to the LRWQCB.

b. If sample results indicate total coliform and/or fecal coliform bacteria are present, and/or nitrate-nitrogen levels are greater than 5.0 mg/l, then the WMPC shall be notified immediately and confirmation of the reported results shall be pursued expeditiously. Notification of sample results shall be immediately forwarded by phone to the owner of the subject well and ICEHS so appropriate measures can be implemented to correct the potential pollution exposure to the residents. ICEHS staff shall immediately instruct the well consumers of the potential health hazard and what should be done to protect themselves.

The confirmation mode shall consist of resampling the well as soon as possible. If the resample confirms the original sample results, an investigation by ICEHS shall be requested. ICEHS investigation will consist of a complete review of the well location, construction, log, depth of well, depth of standing water, depth of submersible pump, age of well, gallons per day usage, distance to existing conventional septic systems, and new alternative septic systems. Also, certain operating and disinfecting procedures should be reviewed before any further sampling, such as; flushing, disinfecting, adjustment of well use before sampling, sampling at different depths, or any other evaluation method that ICEHS deems necessary.

If, after the above procedures, the well does not return to a consistent non-contaminated state, ICEHS may require more specific human sewage pollutant monitoring which shall be discussed with the MCS D and the owner of the well.

The final confirmation monitoring may include but is not limited to the following:

- Streptococcal bacteria
- Methyl blue active substances
- Seasonal sampling
- Frequent routine sampling
- Specialized sampling of aquifer mixing area

At a certain point the assessment of the public health threat to the owner of the well and the aquifer below the MCS D has to be acted upon. Determination and action shall be made by the Director of Environmental Health (ICEHS). If the decision of the Director is that the well is contaminated significantly and should never be used again, the Director shall issue a written order to the the owner of the well stating to discontinue the domestic use of the subject well. At this point the owner of the well has two options; to treat the contaminated well water or apply for a permit to construct a new well. The overall impact of this monitoring on the entire MCS D is further explained in Section G "Renovation Policy and Contingency Plans".

F. MAINTENANCE PLAN

Maintenance will be addressed only on the operation of the individual intermittent sand filter systems. The Maintenance Plan consists of:

1. Septic tank pumping to remove solids (3 years)
2. Cleaning of sand filter pump effluent screen with water delivered by three high pressure nozzles (12 months)
3. Flushing of sand filter laterals with water connected to sand filter flushing line (6 months)
4. Cleaning of sand filter laterals with a bottle brush. Each lateral to be cleaned by feeding the bottle brush into the pipe from the clean out at the end of the lateral (12 months)
5. Cleaning of irrigation system filter (those sites with irrigation disposal system only) By rinsing of filter with water (3 months)
6. Flushing irrigation system with mild acidic solution to remove salts in soil (6 months)
7. Mulching of irrigation system area with a minimum of 2 inches of mulch (Mid-November on an annual basis)

The above Maintenance Plan Schedule will assure a smooth operation of the wastewater systems, and as time passes this Maintenance Plan will be adjusted to provide the most reliable service from the Intermittent Sand Filters and any future designs that may meet the approval of the WMPC.

G. RENOVATION POLICY AND CONTINGENCY PLANS

1. Wells

As stated in the monitoring section, when an existing well consistently produces human sewage contamination results and the Director of Environmental Health (ICEHS) has ordered the discontinued use of the subject well, it is the well owners option to apply for a permit to construct a new well or install a treatment system. This process is acceptable individually, but what of the overall impact on the Mesa community?

The WMPC has concluded that there is no practical means possible to determine where the pollution is coming from that is directly impacting the drinking water quality of the subject well. Therefore, the WMPC has established a renovation policy for all wells constructed before the WMP approval date. The policy requires all confirmed polluted wells from the monitoring plan to be permanently closed or maintained as a monitoring well. The monitoring wells shall be discontinued as a domestic water supply. Determination of closure or monitoring status shall be decided by the WMPC.

Construction requirements for the new well shall be as follows:

- DWR Bulletin 74-90 well standards
- ICEHS conditions
- Annular seal shall be a minimum of 20 feet deep but recommended to first water level
- Overall well depth should be at least 150 feet below first water level

2. Existing On-Site Wastewater Systems

a. Individual

It is virtually impossible to determine whose wastewater system caused the pollution in a confirmed polluted well on the Mesa as determined by the Public Health monitoring. Because of this, the WMPC established a district wide policy requiring ALL wastewater systems installed prior to 1993 to renovate to a higher level of treatment. The higher level of treatment can be established by implementing the construction standard outlined in Section D "Engineered Alternative On-Site Wastewater System Design", Attachment B, or of equal effluent discharge concentrations acceptable to the WMPC. A permit to construct from the ICEHS shall be applied for and plans submitted for review. After ICEHS approves the permit the scheduled renovation of the existing system can be pursued.

b. Area Wide

This Plan has been conceived on the basis that the Mesa could build out with alternative designed wastewater disposal system providing the guarantee that groundwater will not be impacted. As much as the entire WMPC feels that this conceptual approach is appropriate for the Mesa area, there still remains the possibility that a statistically significant degradation or pollution of ground water may occur beneath the Mesa. The detection of such an occurrence requires that a contingency response plan be in place. The Plan has two contingency plans: Level one and Level two, defined as follows:

Level 1: Consists of the retrofitting all septic systems constructed prior to August 12, 1993 on the Mesa to the new sand filter design standards (see Triad Engineering's report, Attachment B) in a two year period.

Level 1 can be triggered in any one of the following three ways:

Trigger 1 = Data from the aquifer sampling program (section E.2.) will be analyzed for statistically significant compliance with water quality standards by plotting the data from the ground water monitoring wells on a frequency versus contaminant concentration graph (Figure 1). The baseline data will first be plotted on the graph and an arithmetically determined mean will be established. Three standard deviations will then be marked off from the mean to determine the maximum allowable nitrate-nitrogen concentration (the limit). If the mean value for the ground water monitoring wells in future rounds of sampling fall outside the limit, the Level one contingency plan will be triggered. Triggering by this method would allow two years for completion of the Level one contingency plan. This triggering mechanism is for scenarios where nitrate-nitrogen levels are slowly approaching the allowable limit.

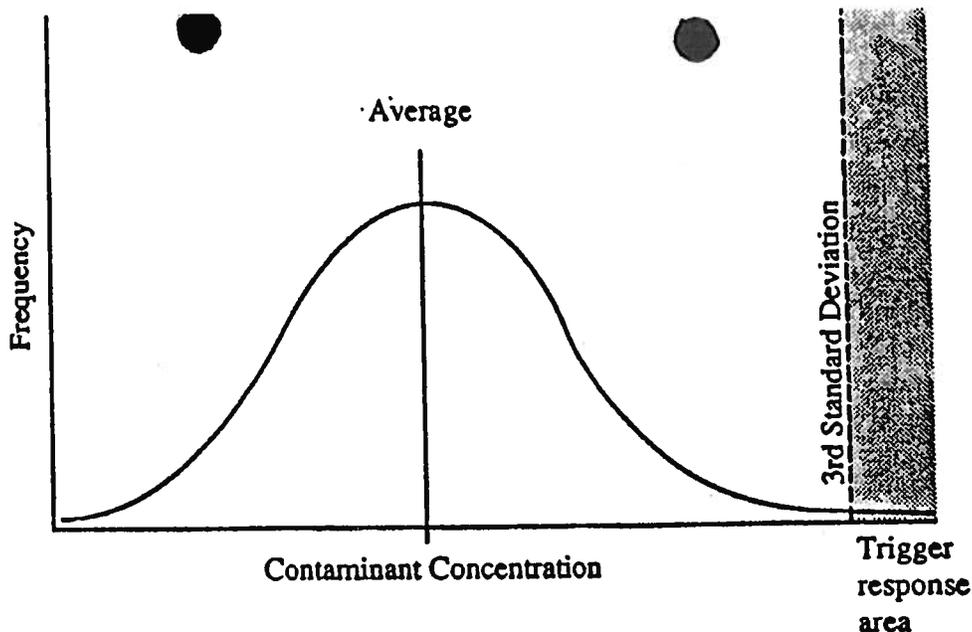


FIGURE 1.

Trigger 2- The data from the aquifer sampling program (section E.2.) will again be analyzed for statistically significant compliance with water quality standards by this time plotting the data from the ground water monitoring wells on a contaminant concentration versus time graph. The sampling data from the selected ground water monitoring wells is continuously plotted on the graph and a "best-fit" line is drawn through the last three years (six, six-month sampling events) of monitoring data. This last three years of data is then reviewed by the WMPC to determine the rate of nitrate-nitrogen concentration increase.

This approach is intended to recognize and respond to the rate at which nitrate concentrations are approaching the allowable limit as determined by Figure 1. If nitrate-nitrogen concentrations are approaching the allowable limit so quickly as to not allow an adequate response time before it is exceeded, then contingency plans can be triggered early to allow for such an adequate response time. An adequate response time is critical to preventing excessive and unnecessary ground water degradation. For example, as illustrated in Figure 2, if the last three years of monitoring well data indicate a rapid and continued passing of the contaminant limit within two-years (Level one implementation time), then the Level one plan will be triggered.

Due to inherent unknowns in forecasting contaminant concentrations, the WMPC may continue to refine details in this area of the plan at its discretion.

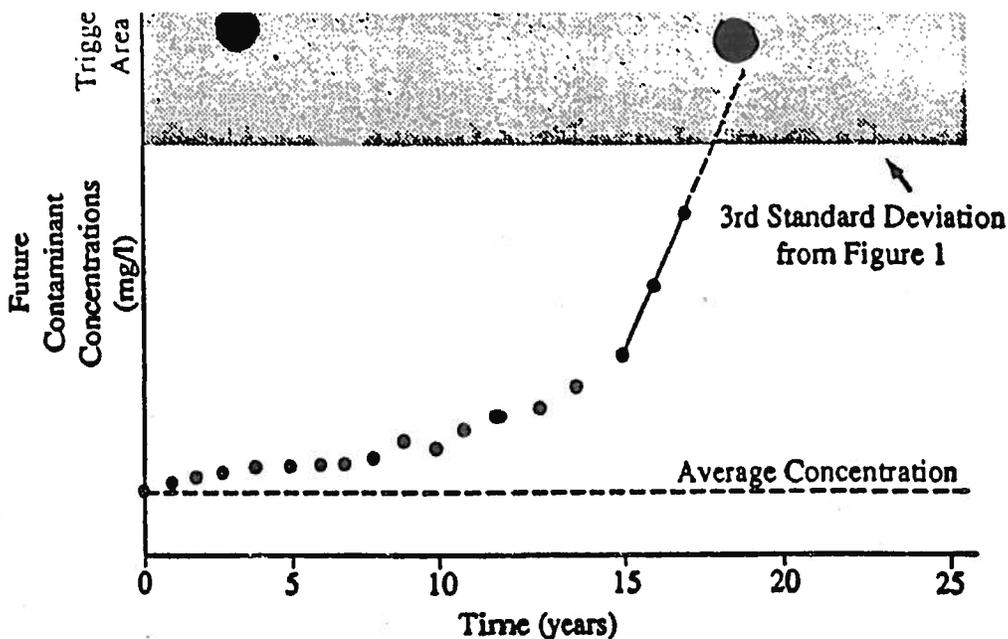


FIGURE 2.

Trigger 3- Level one can be triggered if any single domestic supply or monitoring well is confirmed by the WMPC and the Director of Environmental Health has issued to the owners of the well in question a written order to close or treat their water. Confirmation procedures are in the Ground Water Monitoring section 2.b.3.b. of the WMP. This significant human sewage contamination may take the form of bacterial contamination or nitrate-nitrogen data from the single well exceeding 5.0 mg/l.

If the WMPC confirms any of the above triggers, then the Director of Environmental Health Services shall serve a written order to all existing wastewater disposal systems constructed before August 12, 1993, to renovate their systems up to that year's WMP treatment goals and design. The above effected property owners shall have 2 years to complete the renovation or they will be subject to fines, penalties and/or referral to the Inyo County District Attorney's Office as established in the MCSD WMP Enforcement Ordinance. If the WMPC does not confirm any of the above triggers then sampling and data plotting shall resume its normal process.

Level 2: Consists of the sewerage of the Mesa in a five to ten year period commensurate with the manner in which the contingency plan is triggered. For example, if sample data indicates that the allowable limit for nitrate-nitrogen will be quickly reached and exceeded, then sewerage would be required in five years. However, if the allowable limit for nitrate-nitrogen was being approached very slowly, then up to a ten year period could be allowed without the additional time allotment causing a significant amount of additional ground water degradation.

Level 2 can be triggered by one of the following two ways:

Trigger 1= If after Level 1 has been implemented there still exists a individual domestic or monitoring well that is confirmed to have nitrate-nitrogen contaminant level exceeding 8 mg/l then the WMPC shall implement a thorough review of the Mesa hydrogeology, sampling techniques and analysis, geographical variation of analysis, designated monitoring well conditions and use, etc., in an effort to validate or disregard the reported high nitrate-nitrogen level. The WMPC shall then submit a formal report of this investigation and their recommendation to the RWQCB within 2 years of the first greater than 8 mg/l nitrate-nitrogen date of analysis for their review and action.

Trigger 1 & 2= If after implementation of the Level one contingency plan, ground water degradation should level off or possibly even drop. The WMPC will continue to review the ground water data to monitor for the above anticipated pattern change. If no changes are observed in a reasonable period of time, based on local hydrogeologic conditions such as precipitation patterns, then a new nitrate-nitrogen level baseline will be established and the Level one triggering process triggers one and two, would be repeated as previously described except that the Level two (sewering) contingency plan would be implemented.

This entire section is subject to review periodically as stated in the Purpose. Flexibility and review are essential tools to be used down the road so that this data collection process can be properly interpreted in relation and context with the physical characteristics of the Mesa. The WMPC's long-term responsibility lies with the interpretation of the collected data, with the given physical characteristics of the Mesa and the action/no action necessary to preserve both public health and aquifer protections.

H. Appeals

Any individual property owners who request appealing the Director of Environmental Health's decision on Level 1 shall submit in writing the entire justification to the WMPC for their review and recommendation. The Director of Environmental Health shall then review the committee's recommendation and submit in writing his/her decision. If any individual or the MCSD requests appealing Level 2 order from the LRWQCB Executive Officer, he/she or they shall submit the appeal per Lahontan's appeal guidelines.

I. MUSTANG MESA WASTEWATER MANAGEMENT PLAN APPROVAL

Formal approval of this Wastewater Management Plan will be in the form of a Memorandum of Understanding between the Mesa Community Services District Board, Inyo County Board of Supervisors, and the Lahontan Regional Water Quality Control Board. This document will specifically outline all three agencies responsibilities associated with this Wastewater Management Plan and will become Attachment D of this entire document.

MUSTANG MESA WASTEWATER MANAGEMENT PLAN

**Memorandum of Understanding
between the
California Water Quality Control Board
Lahontan Region,
County of Inyo,
and the
Mesa Community Services District**

This Memorandum of Understanding is entered into by and between the California Regional Water Quality Control Board, Lahontan Region (hereinafter Board), the County of Inyo (hereinafter County), and the Mesa Community Services District (hereinafter Mesa CSD). Its purpose is to acknowledge the cooperative involvement by these three agencies over the last 2 and 1/2 years which has established a safe, workable wastewater management plan for the build-out of the Mustang Mesa/Alta Vista Community, in Bishop, California. The Memorandum of Understanding recognizes the cooperative effort by the above mentioned agencies and charges them with the same participatory responsibility in the future. It also clearly defines the responsibilities specifically outlined in the Mustang Mesa Wastewater Management Plan (hereinafter Plan)(attachment 1). This Memorandum of Understanding shall supersede over any conflicting points which may arise between it and the February 6, 1990 Septic Tank Guidelines Memorandum of Understanding between the Board and the County.

On January 9, 1991 the Board voted to direct staff to draft a resolution lifting the 2 prohibitions established in 1975 on the Mustang Mesa/Alta Vista Community. The resolution contains the condition that the "County is delegated the authority to monitor and regulate the Mesa". In addition the Board voted to direct staff to meet with the County and the Mesa CSD (Wastewater Management Plan Committee, hereinafter Committee) and formulate a wastewater management plan for the Mesa that would meet the approval of all agencies involved. Through numerous meetings by the Committee, a conceptual Plan was developed. In addition to these meetings a "Mustang Mesa Ground-Water Investigation" (attachment 2) and a "Site Feasibility Analyses and On-Site Sewage Disposal System Design for the Mustang Mesa Community Services District" (attachment 3) were contracted by the County and the Mesa CSD respectively.

The implementation of the Plan will involve numerous regulatory, monitoring, and communication requirements. Inherent to this process are the unknowns in forecasting contaminant concentrations, future wastewater disposal technologies, and regulatory procedures. Therefore it will be the charge of the Committee to review and recommend to the agencies involved any changes necessary to maintain the overall purpose of the Plan.



It is agreed that:

I. The Board authorizes the County to issue construction permits for individual residential and commercial discharges of domestic wastewater to on-site wastewater disposal systems that conform to the Plan's present or future specifications. Regulation and inspection of the siting and construction of the above systems will be the responsibility of the County.

II. The Mesa CSD shall routinely perform the required maintenance on all individual/cluster residential/commercial on-site wastewater disposal systems installed or renovated after the date of this Memorandum of Understanding.

III. The Mesa CSD is responsible for implementing and performing the Plan's on-going monitoring requirements (effluent, aquifer, and public health). It is also the responsibility of the Mesa CSD to report the results of the monitoring program to all appropriate agencies (Lahontan Regional Water Quality Control Board and Inyo County Environmental Health) and property owners as outlined in the Plan.

IV. The Mesa CSD shall establish local authority to implement and carry out all requirements of the Plan, and create enforcement procedures and actions for non-complying property owners. This enforcement procedure and action may be formally delegated to the County if it accepts responsibility. The Level one and Level two contingency plans are described in the Wastewater Management Plan. The County shall have the primary enforcement responsibility for the Level one, sand filter upgrade, contingency plan. Enforcement of the Level two, contingency plan, sewer upgrade, shall be the primary enforcement responsibility of the Board after thorough review by the Committee. The enforcement of either the Level one or two contingency plans by the primarily responsible agency shall have the full support of the two remaining parties to this agreement.

V. The County and the Mesa CSD shall maintain records of all construction permits; well and on-site wastewater disposal, and monitoring data, and, as required in the Plan, provide all agencies and property owners with annual reports of monitoring/maintenance/renovation activity. In addition any changes to the Plan recommended by the Committee shall be reported and distributed as described above by the County. To take effect, such recommendations would require formal adoption by all three parties in the form of an amended Plan.

VI. The Mesa CSD, County, and the Board shall continue to participate as active dedicated members of this Plan's Committee, and attend Plan review/update meetings as necessary. The Committee's purpose is to promote safe, well-planned development of the Mustang Mesa/Alta Vista Community and to protect ground water from degradation of water quality objectives over time.



VII. This Memorandum of Understanding shall be effective immediately after execution and shall remain in full force until terminated by thirty (30) day written notice by any of the three parties.

VIII. This Memorandum of Understanding may be amended as mutually agreed by the County, Mesa CSD, and the Board.

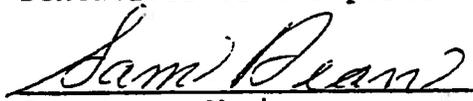
IX. All notices and communications under this Memorandum of Understanding shall be addressed to the following:

William Perry
President, Mesa CSD
P.O. Box 221
Bishop, California 93515

Robert L. Kennedy
Director of Environmental Health
Inyo County
P.O. Box 427
Independence, California 93526

Executive Officer
California Regional Water Quality Control Board
Lahontan Region
2092 Lake Tahoe Blvd.
P.O. Box 9428
South Lake Tahoe, California 95731-2428

This Memorandum of Understanding is executed of the date of the most recent signature below, by the following authorized representatives of the parties.


Sam Dean, Chairperson
Board of Supervisors
Inyo County

Date: 8-13-93


William Perry, President
Mesa Community Services
District

Date: 8/3/93


Executive Officer
Calif. Reg. Water Quality Board

Date: August 30, 1993

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD -
LAHONTAN REGION**
22 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA 96150
(916) 542-5400 FAX (916) 544-2271



August 26, 1996

TO INTERESTED PERSONS AND AGENCIES:

**LAHONTAN REGIONAL BOARD MEETING, SEPTEMBER 5 AND 6, 1996 IN
BISHOP, CALIFORNIA**

Enclosed for your information is a copy of the agenda announcement for the Regional Board meeting. I have also enclosed a copy of agenda item 21 for your review.

If you need further information regarding this meeting, please contact our office.

Sincerely,

Shirley Harada
Shirley Harada
Office Technician

Enclosures

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD -
LAHONTAN REGION**

1992 LAKE TAHOE BOULEVARD
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(916) 542-5400 FAX (916) 544-2271



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Shirley Harada
Shirley Harada
Office Technician

Enclosures

MAILING LIST FOR MUSTANG MESA CSD

ORGINATOR: TAMMY LUNDQUIST

FOR SEPTEMBER, 1996 BOARD MEETING

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BISHOP, CA 93514

GLEN BOLENBAUGH, VICE PRESIDENT
618 HOUSTON DRIVE
BISHOP, CA 93514

DONALD FREDELL, TREASURER
502 AVENIDA DEL MONTE
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DON OWEN
641 HOUSTON DRIVE
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INDEPENDENCE, CA 93526