



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

APR 30 1990

MEMORANDUM TO: California File

THROUGH: Vandy Miller, Assistant Director
State Agreements Program *M 8/22*

THROUGH: Joel O. Lubenau, Senior Projects Manager
State Agreements Program *JOL 5/25/90*

FROM: Jack W. Hornor, Region V State Agreements Representative *JWHornor*

SUBJECT: CALIFORNIA MID-REVIEW MEETING

Meeting Dates: April 9-19, 1990

NRC Representatives: Jack Hornor, Beth Riedlinger, Jim Shaffner, B Jagannath,
F. Ross, Ross Scarano

Next Review Date: January 1991

Last Review Date: March 1989

Meeting Agenda:

1. Review of State's progress in resolving problems found during previous review;
2. Discussion of State's progress in adopting compatibility regulations;
3. Follow-up on misadministrations and AOR's;
4. Determination of current status of compliance program;
5. Discussion of important All Agreement State Letters issued since previous review and State's action on issues;
6. Discussion of problems, if any, in working relationship between the State and NRC;
7. Discussion of regulatory problems encountered by the State during the review period;
8. Discussion of questions suggested by the State staff;
9. Review of selected license and compliance files, management audits, incidents, instruments, calibration records (as time permitted);
10. Review of State's low-level waste regulatory program including management and organization; staffing levels and expertise; use of

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contractual assistance; licensing process; license review procedures; and technical analyses regarding siting issues and engineering design.

11. Informal evaluation of low-level waste program against proposed NRC guidelines for low-level waste.
12. Exit meetings with management and staff to offer comments and suggestions for improvement before formal review meeting.

Staff Conclusions:

Overall, California's radiation control program is very good and continues to show improvement. The programs for regulating agreement material and low-level waste are both adequate and compatible; however there is some concern that the State could fail to meet the guidelines in two Category I Indicators, Status and Compatibility of Regulations and Status of Inspection Program, by the time of the next full review in January 1991.

All comments made following the previous review have been satisfactorily resolved and closed out.

Two exit meetings were held with California representatives to discuss the observations and suggestions made by the NRC staff during the visit. Mr. Shaffner and Mr. Hornor met with Don J. Womeldorf, Chief, Environmental Management Branch (EMB), on April 19, 1990, to discuss the low-level waste and emergency response programs. On April 24, 1990, Mr. Hornor and Mr. Scarano met with Jack S. McGurk, Chief, Environmental Health Division, and Edgar D. Bailey, Chief, Radiologic Health Branch (RHB), for a summary discussion of the radioactive materials program.

Staff Observations and Recommendations:

LEGISLATION AND REGULATIONS

- * Status and Compatibility of Regulations: The regulations pertaining to industrial radiographers and medical misadministrations have been adopted. The regulations regarding bankruptcy notification, well logging and NVLAP certification are at various stages in the promulgation process, but have not yet been adopted. The State feels that, except for well logging, all compatibility regulations will be adopted by the time of the next review. The well-logging requirements are in the license conditions now. ✓

MANAGEMENT AND ADMINISTRATION

- * Quality of Emergency Planning: The emergency response responsibility belongs primarily to the EMB, using some RHB health physicists (or county and city HP's under contract to the RHB) as responders. A steering committee made up of the Division Chief and the chiefs of the two branches has been established to coordinate emergency response along with other joint activities. A new emergency plan is now in place, and "glitches" are being worked out as the State continues to provide excellent emergency response. The LLW emergency response will be

developed during the licensing process and will be incorporated in the general plan when complete.

The following suggestions were made:

- a. A formal management review of the emergency plan should be scheduled annually.
 - b. Emergency response training should be included in each semi-annual RHB meeting.
 - c. The MOU between the two branches needs to be updated to reflect changes in responsibilities.
 - d. Pagers should be obtained for the primary responders.
 - e. The system for distributing information issued by the State or the NRC regarding emergency response should be reworked to ensure all responders receive and acknowledge the information.
 - f. Inspectors in both RHB and EMB need training and procedures for inspecting waste packaging and shipments.
- Administrative Procedures: The administrative procedures are in the process of being updated by the new office manager, and continue to improve. It was strongly recommended that minutes be kept of all staff meetings in which policy decisions could be made, preferably by a disinterested member of the clerical staff to prevent possible bias from affected reviewers or inspectors.
 - Management: The steering committee discussed above meets regularly to make sure essential program functions are performed without duplication. An MOU dated November 29, 1988, detailed the responsibilities of each Branch; however, changes have been made in the program that are not reflected in the MOU and it should be rewritten.
 - Office Equipment and Support Services: Major improvements have been made in support services. New filing cabinets are now in use, the files are in order, all clerical vacancies but one have been filled, and the new office manager has done an excellent job of training the new staff and establishing better methods of work. One annoying problem has emerged, however. The "voice mail" telephone system is not satisfactory. The staff admitted that under certain conditions an emergency caller could only leave recorded messages, rather than contacting a person that could help. *a "live, person" telephone number has been established as an interim measure - 916-445-0931 - the person answering will seek out the staff member you are calling. JCR*
- PERSONNEL
- Staffing Level: Although there are five vacancies (four in licensing and one inspector), the staffing is just over the NRC suggested level of 1 technical FTE per 100 licenses. The hiring should be complete before the next review.

- Training: There are several new license reviewers that need the licensing course.

LICENSING

- Technical Quality of Licensing Actions: Thirteen license files were reviewed, and for the most part the quality was very good. Most errors were typographical and the need for better proofreading was discussed with the staff. Individual comments and suggestions for improvement were discussed by Ms. Riedlinger with each reviewer. Because there are several new reviewers, the need for more supervisory review and guidance was discussed with the licensing supervisors. The list of licenses reviewed with case-specific comments will be included with the next review report.
- Adequacy of Product Evaluations: Time did not permit technical review of SS&D files; however all errors found in SS&D sheets during the previous review were corrected at the time. The State staff commented on several discrepancies found in SS&D sheets issued by the NRC. These were identified in two letters from B. Riedlinger to J. Glenn dated April 23 and April 24, 1990.
- Licensing Procedures: The licensing manual started prior to the last review has been very beneficial to the reviewers and has improved consistency between licensing groups. While the supervisory staff is still in the process of completing the procedures, the work done thus far is excellent. The need for written procedures for license terminations was discussed with the supervisors and program management.

COMPLIANCE

- Status of Inspection Program: The State currently has about forty overdue inspections by NRC standards. This is partially due to the recent change in NRC priorities,* and also relates to vacancies and overdue inspections in the contracting agencies. On July 1, 1990, RHB will assume the responsibility for inspections now assigned by law to the Department of Industrial Relations. The well-experienced DIR inspection staff will be transferred to RHB, giving the compliance supervisor more flexibility in assigning inspections. The State has an action plan to eliminate the overdue inspections by the next review.
- Responses to Incidents and Alleged Incidents: A new system for closing out incidents has been developed and appears to be working well. A new system for handling misadministrations is under development. There were no serious incidents or misadministrations since the last review.
- Inspection Procedures: The inspection forms have been completely revised and all inspectors are now uniform in their use. Specialized forms such as broad scope, veterinary medicine, etc. are now being developed.
- Inspection Reports: Seven compliance files were reviewed, and again there was significant improvement. The reports are more complete and

* This should not be a factor once we advise the Applicant States of a phase-in period for implementing the new priorities. JCR

consistent, and the files themselves were much more orderly. The list of files and case specific comments will be included in the next review report.

LOW-LEVEL WASTE PROGRAM

The consensus is that California's program is adequate and compatible, and the State is doing fine work in licensing the new site. The State was commended for keeping the program on target and for encouraging public input at each step of the licensing process. The following recommendations were discussed during the exit meeting with Mr. Womeldorf:

- * Staffing: DHS should consider hiring a full time LLW regulatory staff member with expertise in earth sciences (geology, hydrology, etc.) within the next one to two years to supplement staff from other scientific disciplines. Through the use of contractors and ad hoc committees, both internal and external to DHS, the LLW regulatory program currently possesses the disciplines necessary for licensing. It was noted, however, that there was no one with a complete background in earth sciences on the full-time LLW core staff. Currently, the expertise is adequately represented by a combination of part time earth science assistance from the California Regional Water Quality Board and the fact that the LLW Project Director has some expertise in the area; however the addition of an earth scientist to the staff would enhance the program.
- * Licensing Procedures: It was noted the EMB has made little progress since the last review in developing written internal licensing procedures and checklists. Informal procedures seem well established between staff members both in and out of EMB. However, to ensure program continuity and uniformity, these procedures should be written.

Interrogatories (deficiency letters) from the reviewer to the applicant should be drafted in a way which establishes the basis for the questions and the justification for asking the question. Although the contractor reviewing the application drafts the letters, they require approval from EMB before they are sent to the applicant. Thus EMB staff should document the process for both selecting interrogatories and for establishing the level of effort to be applied by the licensee in responding to the interrogatory. This will facilitate the process of determining how much effort must go into the response.

- * Compliance: Although it is still early in the licensing process, the State should be developing LLW specific components of its compliance program. During the license review process, EMB should be drafting inspection procedures, hiring and training inspection personnel and modifying the enforcement process used by RHB as necessary for LLW regulation.

Summary Assessment:

The program is currently in the process of reviewing an application for low-level waste disposal. It is anticipated that the application review process

will be complete in late 1990 and that a licensing decision will be made in early 1991. A positive licensing decision on the current application could lead to start of operations by late 1991. A negative licensing decision would require submittal of a new application for an alternate site. This circumstance could lead to significant but not insurmountable delays.

The review team also analyzed conflict of interest potential that could be associated with EMB's role as the primary State interface with U S Ecology, the licensee designate. Again, it was concluded that adequate checks and quality assurance processes were in place to assure that such conflict of interest potential would not materialize.

Another major area of emphasis in the review concerns the heavy reliance on contractors in the license review process. By interviewing both State regulatory personnel and contractor personnel, it was concluded that the State has developed a well-thought-out and workable process for supplementing its limited resources by using contractor expertise to provide discipline-specific reviews of the license application. It was concluded that contractor review is supplemental to, not a substitute for, in-house review. In fact, ad hoc committees comprised of DHS and other State personnel provide a balanced review effort irrespective of the contractor review.

Guideline Specific Comments:

Legislation and Regulations: California has the legal authority to develop and implement regulations, establish fees, assess and collect civil and criminal penalties, and assure compliance with regulations. Further, they have adopted NRC low-level waste regulations.

Organization: The low-level waste program is located appropriately in State government. MOU's exist that establish the scope of authority for different agencies which have regulatory responsibility. Legal assistance is readily available and is being used. Through the use of ad hoc committees that include representation by external groups with varied interests in the outcome of certain activities, DHS has established a process of oversight that lends itself to objectivity in the regulatory process.

The California Regional Water Quality Control Board (RWQCB) for the Colorado River Basin, which has independent regulatory authority over the facility, is working closely with EMB to provide technical expertise to the regulatory process. In addition, DHS staff outside of EMB with expertise in radiation protection participate directly in the review process. In-house resources are supplemented by the use of technical assistance contracted for license review and for EIS development. Also, a Q/A contract provides additional oversight. In total, the system of Q/A and regulatory checks appears to be sufficient to mitigate concerns over conflict of interest potential.

Management and Administration:

Quality of Emergency Planning: The low-level waste program has yet to develop a program-specific emergency response plan; however, it will be done during the licensing process.

Budget: The budgetary process seems structured to ensure the availability of funds necessary for regulatory activities.

This review included participation in a meeting of a fiscal oversight committee which supports EMB in setting disposal rates. The review team viewed this exercise from the perspective of any health and safety impacts that could occur from the differing objectives of rate setting and regulation. This line of analysis was pursued rigorously and it was concluded that adequate checks are in place to assure no compromise in the regulatory process due to the rate setting process.

Laboratory Support: Lab support is available and lab staffing will be increased as necessary as the site begins operation.

Administrative Procedures: Because low-level waste specific administrative procedures have not been developed, it was recommended writing the procedures be given high priority. This is especially urgent due to the complexity of the licensing process.

Management: Management, up to the very highest level, is very interested and involved in low-level waste management decisions. A project manager has been assigned specifically to the low-level waste project.

Public Information: Public workshops and hearings have been an integral part of the site selection and application review processes.

Personnel: Staff qualifications and staff supervision are satisfactory at the current time. The State was urged to increase staffing levels in the low-level waste program, and to eventually include an earth scientist (geologist, hydrologist, etc.) on the permanent low-level waste staff.

Licensing: The State has implemented a rigorous program for reviewing the license application, using core staff, ad hoc committees, and contractor personnel. However, there are no written license procedures to use as guidance for reviewing the application and writing the license.

Compliance: Low-level waste specific elements of the compliance program are in the development stage. The procedures will address site, transportation and point of origin compliance requirements.

Environmental Monitoring: The State plans to establish on-site and off-site monitoring programs involving independent samples for soil, vegetation, air and direct gamma. On-site groundwater monitoring samples will be split with the licensee and analyzed independently.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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MEMORANDUM FOR: Carlton C. Kammerer, Director
State Programs, GPA

FROM: Richard L. Bangart, Director
Division of Low-Level Waste Management
and Decommissioning, NMSS

SUBJECT: COMMENTS AND RECOMMENDATIONS FROM THE CALIFORNIA
AGREEMENT STATE PROGRAM REVIEW VISIT, APRIL 9-12

The attached report provides a summary of staff comments and recommendations relative to review of the LLW portion of the California RCP. We recommend that a copy of the attached report be sent to Jack McGurk, Director, Division of Environmental Health, California Department of Health. Thank you for the opportunity to participate in this review.

Richard L. Bangart

Richard L. Bangart, Director
Division of Low-Level Waste Management
and Decommissioning, NMSS

Enclosure: As stated

cc: J. Hornor

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REVIEW VISIT - CALIFORNIA LLW REGULATORY PROGRAM
APRIL 9-12, 1990

NRC Participants: J. Hornor, RSAO, R V; B. Jagannath, LLTB; F. Ross, LLTB;
J. Shaffner, LLOB

Persons Contacted: J. McGurk, Director, Environmental Health Division;
D. Womeldorf, Chief, Environmental Management Branch;
R. Junkert, G. Butner, R. Huck, Environmental Management
Branch (EMB); P. Serie (R. F. Weston); E. Bailey, Chief,
Radiological Health Branch (RHB); and members of the Fiscal
Review Group

Scope of Visit: Off-year review visit; to familiarize LLWM staff with the
overall LLW disposal program in California.

Materials Reviewed: LLW license application (in part); Contractor and Staff
interrogatories; LLW legislation and regulations; MOU with
the Regional Water Quality Control Board (RWQCP); MOU with
RHB; EMB checklist for licensing issues; example guidance
to applicant; process for LLW disposal rate setting
(to establish independence of regulatory process regarding
Health and Safety)

Comments and recommendations on California's Agreement State LLW regulatory
Program are presented below. California's responses to questions regarding
their LLW program are included as an attachment.

1. Staffing - Category II

Comment:

Through the use of contractors and ad hoc committees, both internal and
external to the Division of Environmental Health (DEH), the LLW regulatory
program in EMB currently contains most, if not all, disciplines necessary
for licensing. It was noted, however, that there was no one with an
extensive background in earth sciences on the full time LLW core staff in
EMB. Currently, the expertise is represented by a combination of
part-time earth science assistance from the Regional Water Quality Control
Board (RWQCB) and by the LLW Project Director who has some expertise in
this area.

Recommendation:

It is recommended that DEH consider hiring a full time LLW regulatory
staff member with expertise in earth sciences in the event that current
EMB staff members used in this area are unavailable due to shifting
workload or other priorities.

ENCLOSURE

2. Technical Quality of Licensing Actions - Category I

Comment:

EMB staff, working with its license review group, evaluates interrogatories developed by its contractor before requiring a response from the license applicant. Changes or deletions to the interrogatories may be made by EMB, and a level of effort specified by EMB for preparation of the response by the license applicant.

Recommendation:

EMB should document the decision making process for its review of interrogatories and the actual changes made to specific interrogatories. Such a record will be needed to document the basis and defend the EMB review throughout the licensing process.

3. Licensing Procedures - Category II

Comment:

Although informal procedures appear to be well established between staff both in and out of EMB, it was noted that EMB has made little progress since the last review in developing written licensing procedures and checklists.

Recommendation:

To ensure program continuity and uniformity, EMB should develop and implement written procedures for licensing activities.

Comment:

Interrogatories for the license applicant do not always explain the basis and regulatory justification for the question.

Recommendation:

Future interrogatories should include the basis for the comment, the concern, and, where possible and appropriate, a statement of the action that is recommended to resolve the concern (such as providing certain additional information). Such an approach will aid in determining the regulatory impact of the question and the effort needed to resolve it, and, in general, facilitate the resolution of comments.

4. Compliance

Comment:

Although it is still early in the licensing process, EMB needs to put into place its compliance program for the LLW disposal facility.

Recommendation:

EMB should begin work on its compliance program, including developing inspection procedures, hiring and training inspection personnel, and modifying the enforcement process currently being used by RHB in the materials program, as necessary for LLW.

QUESTIONS FOR CALIFORNIA STATE LLW PROGRAM OFFICE
AND THEIR RESPONSES

1. Describe the role, if any, of the RHB in LLW regulation (licensing, compliance), and when does it "kick in"?

EMB is the primary licensing entity for the LLW disposal facility. RHB has a role in ensuring generator compliance with LLW disposal requirements. They also have a Q/A role in review of the license application. The respective roles and responsibilities of RHB & FMB with respect to LLW are specified in an MOU dated 11/29/88.

2. Describe the Q/A checks used to ensure a quality review by contractor personnel reviewing the license application:

- a. Are there independent reviews by State staff?

There are reviews of contractor work by both state staff and Ebasco, Inc., a contractor hired specifically for Q/A.

- b. Are contractors visited?

Developer contractors are visited both by State staff and Q/A contractors to ensure prudence and reasonableness of work effort.

- c. What is the frequency of the contact with the contractor?

There is almost daily contact between EMB staff and the prime license review contractor.

- d. Is there management oversight of contractor's progress and work product?

All contractors are required to submit monthly progress reports. These are supplemented by conference calls and evaluations by EMB and the Bureau of Land Management (as appropriate for EIS development).

3. Describe the process by which the State will develop the SER and EA from contractor application review.

Prime contractors will develop SER and EIR documents as well as supplemental license conditions. The EMB and license review committee oversees both processes. EMB is responsible for developing the final license based on SER and EIS Process.

4. Describe the compliance program that will be instituted at the LLW facility, both for transportation and site inspection; please include construction inspection.

ATTACHMENT

There will be two on site inspectors when the site is operational with rotating responsibilities for transportation and site inspections. EMB anticipates hiring a civil engineer to be used in part to inspect facility construction. Full development of the LLW compliance program is pending.

5. Describe the financial surety mechanisms for the facility, including closure, PC&M, and liability (if appropriate).

The State has a very complex system for rate setting which captures the many elements of cost associated with developing, regulating and ensuring a facility. Within this system they have a mechanism for developing and adjusting surety mechanisms including closure, PC & M and third party liability. In addition, the licensee must carry \$10M of insurance.

6. Briefly outline program for assessment of civil penalties as they apply to LLW.

The mechanism for assessment of LLW specific civil penalties has yet to be developed. However, the RHB has a mechanism in place that is easily adaptable to LLW needs.

7. Briefly describe the LLW fee structure.

The waste disposal fee will be set by DHS as part of the overall rate setting mechanism.

8. Discuss any independent testing or monitoring program to be initiated by the State regarding the LLW facility construction and operation.

EMB currently anticipates little or no independent testing of engineering materials during site construction. This is due to the simplicity of the site. Independent monitoring and testing will take place during site operations. It will be performed by DHS on site personnel and supplemented by EMB contractors as necessary.

9. Discuss the attention given by upper management (Division Director level and higher) to LLW regulation.

There is a great deal of interest and attention to the LLW program all the way up to the Governor's office. It was noted that in the Department's quarterly reports to the Governor, LLW is always an issue.

10. Describe the availability of lab facilities for both radiological and non-radiological analyses.

While lab facilities are available for both radiological and non-radiological testing, EMB does not anticipate the need for much independent engineering types of tests (soil testing, concrete strength testing, etc.).

11. Describe any proposed increment in full time EMB staff for the LLW project from now through the licensing process, and the reasons for the change; include the number and disciplines.

Through the licensing process, the LLW regulatory program plans to "ramp up" from a current level of approximately 2-3 FTE's to about 12. Since the staffing process is cumbersome it is not anticipated that they will be fully staffed until licensing is complete so staff is geared mainly for compliance. As anticipated, about $\frac{1}{2}$ of the staff will be headquartered in Southern California in the vicinity of the site and the other half in Sacramento. Staff responsibilities will include both on site and generator inspections as well as license maintenance.

12. Describe the status of mixed waste regulation in California.

The regulatory status of mixed waste in California is still in the formative stage. There is an ad hoc mixed waste management task force. Ebasco, Inc. has developed a mixed waste management plan for the State. The RWQCB is very involved with this as an agency that has some hazardous material authority in the state. Overall, the strategy is to manage mixed waste in a way to minimize it both by avoiding its creation and reducing its volume. Currently, 700 C.F. per year of mixed waste is being produced in California.

13. Briefly describe interactions with other State agencies which have a role or responsibility in LLW management.

The primary outside agency with LLW interest and authority is the Regional Water Quality Control Board. See also list of ad hoc committees and working groups.

14. Describe the process for public involvement during the licensing process (hearings, dissemination of information through media, availability of reports and studies, etc.).

Citizens advisory groups established during site development have been kept intact during the licensing process. The public will have an opportunity to comment on the application. There will be four public workshops and concurrent EIS hearings in the vicinity of the proposed site. These hearings are currently scheduled for summer, 1990. Input will be factored into the decisionmaking documents (due for completion in late 1990).

15. Describe the role of any technical or citizen's advisory committees in the licensing process.

See answers to 13 & 14. See also table of ad hoc committees.

16. Has EMB or its contractors developed any procedures to supplement NRC's license review documents (NUREG 1199/1200)? If so, please furnish copies.

Weston has produced a license review plan that was provided to NRC for review. To date EMB has produced no additional supplemental procedures.

17. Has EMB developed procedures for inspection at a LLW facility?

Procedures for facility inspection will be developed by the new EMB health physicist who is starting shortly. EMB may petition NRC for some technical assistance in this area.

18. Are there procedures for enforcement actions?

Mechanisms and authority are in place for enforcement. To date there are no LLW specific procedures.

19. Will the State's emergency plan be supplemented for the LLW facility? Describe the process.

Yes. San Bernadino County wants to be involved in the process. LLW specific supplements to the ER Plan will be developed during the license review process.