

ATTACHMENT B

MARKED-UP TECHNICAL SPECIFICATIONS

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OFFSITE DOSE CALCULATION MANUAL: The OFFSITE DOSE CALCULATION MANUAL (ODCM) contains the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Radiological Environmental Monitoring Program. The ODCM also contains (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section VII.F, and (2) descriptions of the information that should be included in the Annual SAFSTOR Radiological Environmental Monitoring and Annual Effluent Release Reports required by Specifications VII.J.1 and VII.J.3.

Insert 2

8. **PROCESS CONTROL PROGRAM:** The PROCESS CONTROL PROGRAM (PCP) contains the current formulas, sampling, analyses, test, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

Insert 3

- j. Process Control Program

Insert 4

F. RADIOACTIVE EFFLUENT CONTROLS PROGRAM

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable (ALARA). The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

1. Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,

2. Limitations on the instantaneous (average over a one-hour period) concentrations of radioactive material released in liquid effluents to Humboldt Bay conforming to ten times the effluent concentration limits of 10 CFR Part 20, Appendix B, Table 2, Column 2,
3. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM,
4. Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released to Humboldt Bay conforming to the dose design objectives of Appendix I to 10 CFR Part 50,
5. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,
6. Limitations on the operability and use of the liquid effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to the dose design objectives of Appendix I to 10 CFR Part 50,
7. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY shall be established as follows:
 - a. For noble gases: Less than or equal to an instantaneous dose rate (average over a one-hour period) of less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin, and
 - b. For tritium and radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to a dose rate (averaged over a one-week period) of 1500 mrem/yr to any organ.
8. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
9. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from tritium and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released to areas beyond the SITE BOUNDARY conforming to the dose design objectives of Appendix I to 10 CFR Part 50, and

10. Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

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G. RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

A program shall be provided to monitor the radiation and radionuclides in the environs of the facility to provide assurance that the baseline conditions established by the Environmental Report submitted as Attachment 6 to the SAFSTOR license amendment request are not deteriorating. The program shall provide (1) onsite environmental monitoring consisting of a continuous sampler in the discharge canal, fenceline dosimetry stations, and groundwater monitoring wells, and (2) offsite environmental monitoring consisting of dosimetry stations that represent a gradient downwind in the prevailing wind direction. The program shall (1) be contained in the ODCM and (2) include the following:

1. Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,
2. Participation in an Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

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An Annual Radiological Monitoring Report shall be submitted to NRC within 90 days of January 1 of each year. The report shall include (1) a description of the results of the facility radiation surveys and the status of the facility, and (2) the Annual SAFSTOR Radiological Environmental Monitoring Report. The Annual SAFSTOR Radiological Environmental Monitoring Report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the ODCM.

Insert 7

The Annual Effluent Release Report covering the previous calendar year shall be submitted to the NRC before April 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a.

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- k. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

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N. PROCESS CONTROL PROGRAM CHANGES

Changes to the PCP:

1. Shall be documented and records of reviews performed shall be retained as required by Specification VII.K.2.k. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - b. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
2. Shall become effective after review and acceptance by the PSRC and the approval of the Plant Manager.

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O. OFFSITE DOSE CALCULATION MANUAL CHANGES

Changes to the ODCM:

1. Shall be documented and records of reviews performed shall be retained as required by Specification VII.K.2.k. This documentation shall contain:

- a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - b. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and the guidelines of Appendix I to 10 CFR Part 50 for the annual dose or dose commitment and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
2. Shall become effective after review and acceptance by the PSRC and the approval of the Plant Manager.
3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

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- A list of the OPERATING LIMITS AND REQUIREMENTS. Whenever a condition occurs that requires corrective action to ensure operation or maintenance within these limits and requirements, such action shall be taken in a timely manner.

Section VII of these Technical Specifications covers administrative and procedural requirements, including the review of proposed changes in DESIGN FEATURES, OPERATING LIMITS AND REQUIREMENTS, and procedures. It also requires procedures for normal and emergency conditions during SAFSTOR.

B. DEFINITIONS

1. ADMINISTRATIVE CONTROLS: The provisions relating to the organization, management, procedures, record keeping, reviews and audits, and reporting that are necessary to ensure maintenance of the Plant in a safe condition during SAFSTOR.
2. DESIGN FEATURES: Those features of the Plant which, if altered or modified, could have a significant effect on the ability of a system, component, or structure to perform its intended function.
3. ELEVATION: All elevations shall apply to a datum of mean lower low water (MLLW) level except where noted.

4. OFFSITE DOSE CALCULATION MANUAL: The offsite dose calculation manual (ODCM) follows the applicable portions of Regulatory Guide

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1.109 and shall contain the methodology and parameters used in the calculation of offsite doses and concentrations due to radioactive gaseous and liquid effluents and in the calculation of gaseous and liquid effluent monitoring alarm setpoints.

5. **OPERABLE, OPERABILITY:** A system, subsystem, train, component, or device may be considered OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electric power sources, cooling or seal water, lubrication, or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s).
6. **OPERATING LIMITS:** The lowest functional capability, performance levels, or safety limits of structures, systems, or components required during SAFSTOR.
7. **OPERATING REQUIREMENTS:** Those requirements relating to operation, test, calibration, surveillance, or inspection to ensure that operating limits will be met.
9. **SAFSTOR:** The period of time during which the Unit is maintained in a condition of monitored protective storage until the final decommissioning of the Unit.

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10. SPENT FUEL: Nuclear fuel that has been removed from the reactor vessel after having been used in critical power generation.

11. STAGGERED TEST BASIS: (a) A test schedule for n (where n is equal to a number) systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals, and (b) the testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.

V. MONITORING SYSTEMS

A. DESIGN FEATURES

1. Stack Gas Monitoring System

A system shall be provided to determine routine releases of particulate radioactivity and to provide monitoring and annunciation of nonroutine releases of radioactive noble gases. The stack gas monitoring system shall consist of a particulate filter holder, a beta-sensitive detector system, and a sample pump to produce a sample flow controlled at approximately 2 cfm. The particulate filters shall be removed for laboratory counting. The detector system shall have two detectors (one as an operating spare) to respond to radioactive (beta-emitting) gases that pass through the system. The detector system shall be designed to be sensitive to Kr-85 in the stack gas from approximately 5×10^{-7} to approximately 2×10^{-2} $\mu\text{Ci/cc}$.

2. Process Water Monitor

A process water radiation monitoring system employing a gamma-sensitive scintillation detector shall be provided to indicate, record, and annunciate high radiation levels in the radwaste discharge line to the circulating water system. The range of the monitor shall be from 10 to 10^6 cpm with a typical

~~sensitivity of 200 cpm per pCi/ml for Cs-137 and 450 cpm per pCi/ml for Co-60.~~

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3. Area Monitors and Portable Monitoring Equipment

Fixed gamma monitors with ranges of 0.01 to 100 μ r/hr or 0.01 μ r/hr to 10 r/hr shall be installed at various locations throughout the Unit. The outputs of these monitors shall be recorded in the control room. Each channel shall have an adjustable high radiation alarm which is annunciated.

One area monitor shall be located in each of the following locations:

- o Refueling building, south wall access door
- o Refueling building, northwest access door

A high radiation signal from either of these channels shall provide a "Building Above Normal Radiation" signal which is annunciated in the control room. These two area monitoring channels shall also provide gamma monitoring of the fuel storage areas. A high radiation level signal from either of these channels shall sound the evacuation horns in the refueling building.

In addition to the area monitoring system, suitable portable and fixed, alpha and beta-gamma detection instruments and beta-gamma

dose rate instruments shall be provided for use of personnel entering the Unit radiation areas and radioactive materials areas and for analyzing samples.

4. Offsite Environmental Monitoring Stations

Four offsite environmental monitoring stations shall be maintained through the SAFSTOR period. These represent a series downwind from the plant in the prevailing wind direction ranging from 0.25 mile to 11.6 miles from Unit 3 (Figure V-1). These stations shall be equipped with dosimetry devices that can be compared with those used onsite.

5. Spent Fuel Storage Pool Water Level Monitors

Two water level indicating devices shall be installed in the SPENT FUEL storage pool. The outputs of these monitors shall be indicated in the control room. Annunciation (visual and audible) of low water level shall be provided in the control room.

6. Onsite Environmental Monitoring Stations

On-site monitoring stations shall include a continuous sampler for water in the discharge canal, dosimeters at or within the site perimeter fence line, and groundwater monitoring wells. The

locations of the dosimeters and the wells are shown by Figures V-2 and V-3, respectively. The onsite groundwater monitoring program shall consist of five wells constructed in the vicinity of Unit 3. Two wells (MW-1 and MW-11) shall serve as background (upgradient) monitoring wells. Three wells (MW-2, MW-4, and MW-6) are located downgradient of Unit 3 and shall serve as groundwater contamination detection wells.

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B. OPERATING LIMITS AND REQUIREMENTS

1. Stack Gas Monitoring System

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- a. The stack gas monitoring system shall be OPERABLE and capable of initiating the stack gas high radiation level alarm whenever the ventilation system is in operation. It may be taken out of service for calibration or maintenance, but shall be returned to service as soon as practicable. The monitors shall be set to alarm at or below the level where the noble gas release rate would result in an instantaneous offsite concentration of airborne radioactive material equal to the appropriate value given in 10 CFR 20, Appendix B, Table II, column 1. This alarm setpoint shall be calculated in accordance with the OOSH.
- b. The calibration of these monitors shall be checked at least once each year. Alarm functions shall be checked weekly for OPERABILITY.

c. The stack particulate filter will be removed for laboratory counting weekly.

d. The vent header that collects all vents from the liquid radwaste treatment facility shall be connected to the plant ventilation exhaust system to permit monitoring by the stack gas monitoring system.

2. Process Water Monitor

a. The monitor shall normally be OPERABLE to detect inadvertent discharge of radwaste. It may be taken out of service for calibration and maintenance but shall be returned to service as soon as practicable. When the monitor is out of service, any release shall be verified by analysis of duplicate independent samples and independent verification of the valve lineup before the activity is released.

b. The monitor shall be source-checked quarterly and shall be calibrated annually. The monitor shall be set to alarm at or below a Cs-137 concentration in the discharge line of 1×10^{-4} $\mu\text{Ci/ml}$. Alarm functions and background readings shall be checked weekly. If a background reading exceeds the equivalent of 5×10^{-5} $\mu\text{Ci/ml}$, the cause will be investigated and remedial measures taken to reduce the background reading.

radiation survey and a contamination survey of the Plant shall be conducted at least quarterly to verify that no radioactive material is escaping or being transported through containment barriers. Contamination samples shall be taken along the most probable path by which radioactive material (such as that stored in the inner containment regions) could be transported to the outer regions of the Plant and ultimately to the environs.

4. Offsite Environmental Monitoring Stations

If stray radiation chambers are used, they shall be monitored every 14 to 15 days, with average and maximum values reported annually.

If film packs are used, they shall be monitored monthly, with average and maximum values reported annually. If thermoluminescent dosimeters (TLDs) are used, they shall be monitored at least quarterly, with average and maximum values reported annually.

If the results from any station indicate that the total radiation dose would be 25 mr/year or more above background, an investigation shall be conducted and necessary mitigative actions taken.

5. Spent Fuel Storage Pool Water Level Monitors

At least one water level monitor shall normally be OPERABLE at all times. One water level monitor at a time may be taken out of

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service for maintenance purposes but shall be returned to service as soon as practicable. At any time when both spent fuel pool water level monitors are inoperable, the water level shall be visually checked at least once each day.

The monitors shall be set to annunciate a low level condition whenever the water level in the spent fuel storage pool drops below ELEVATION 10 feet, 8 inches. Level indication of the spent fuel storage pool water level monitors shall be verified monthly. The level monitors shall be calibrated and the alarm setpoints verified annually.

6. Onsite Environmental Monitoring Stations

- a. The discharge canal continuous sampler shall normally be operating. Composite samples shall be analyzed weekly when the sampler has been operating. If the sampler is inoperable, dip samples shall be taken. Average and maximum activity and concentrations shall be reported annually. Dip samples shall not be used in determination of average and maximum concentrations.
- b. Onsite dosimeter stations shall be monitored at least quarterly. Average and maximum dosimetry values will be reported annually.

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c. The groundwater monitoring wells shall be sampled quarterly for total gross alpha, total gross beta, total gamma activity, and tritium. Average and maximum sample results shall be prepared annually. A report will be submitted within 30 days if any of the parameters listed in Table V-1 are exceeded.

7. Sealed Source Leak Testing

- a. Each sealed source containing radioactive material in excess of 100 μCi of beta-and/or gamma-emitting material or 10 μCi of alpha-emitting material shall be tested for leakage and contamination.

If the test reveals the presence of contamination in excess of _____ 0.005 μCi of removable contamination, the source shall be immediately removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be prepared and submitted to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, within 30 days of the date the leak test result greater than 0.005 μCi is discovered. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries.

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TABLE V-1

OPERATING LIMITS FOR GROUNDWATER ACTIVITY DURING SAFSTOR

<u>Parameter</u>	<u>Limit</u>	<u>Basis</u>
Gross alpha	15 pCi/l	Drinking water standard
Gross beta	50 pCi/l	Drinking water standard
Tritium	3×10^{-5} μ Ci/ml	1% of 10 CFR 20, Appendix B, Table II, Column 2
Gamma emitters	—	1% of 10 CFR 20, Appendix B, Table II, Column 2 for individual isotopes

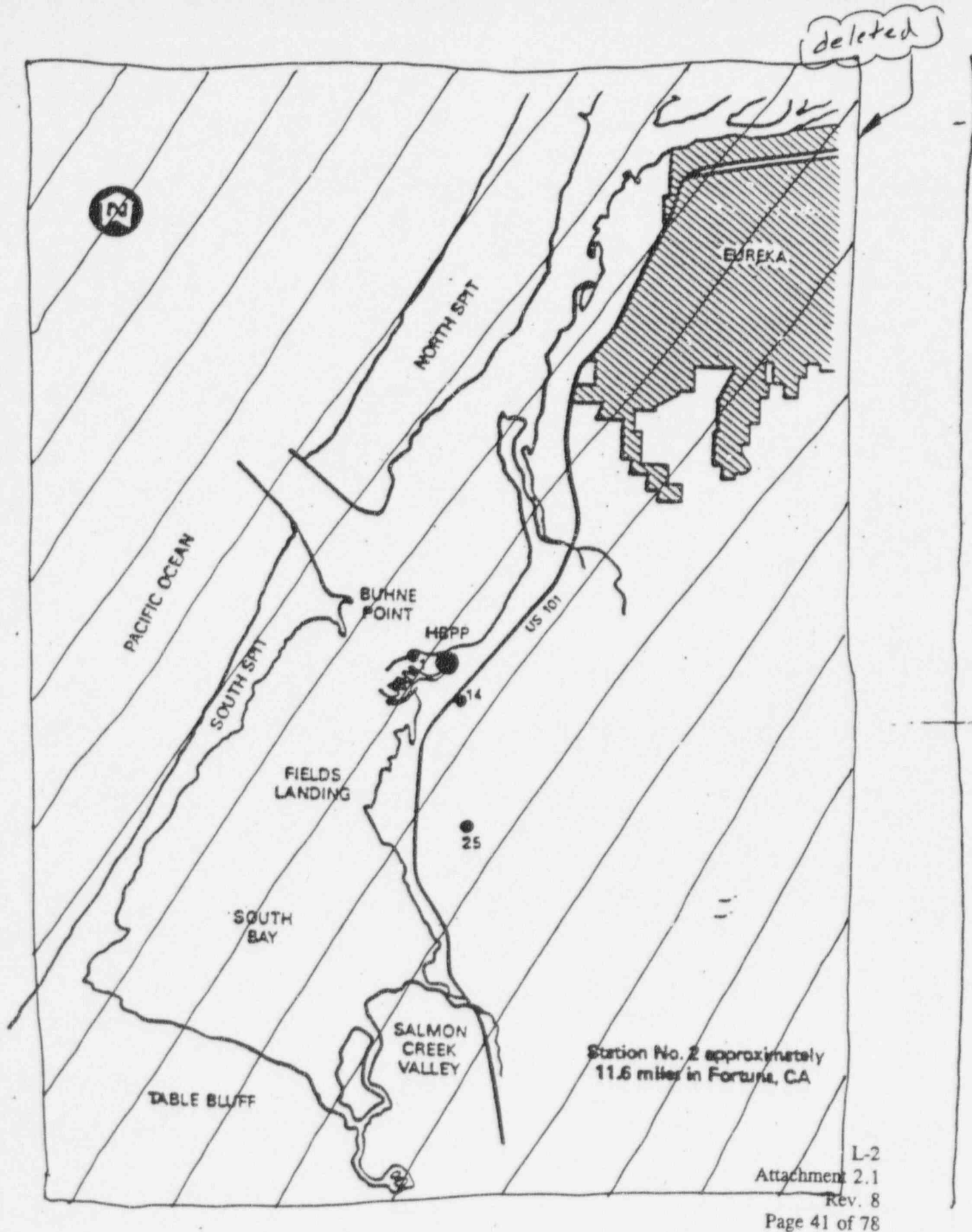


Fig.V-1 Dosimeter Locations for Stations near HBPP

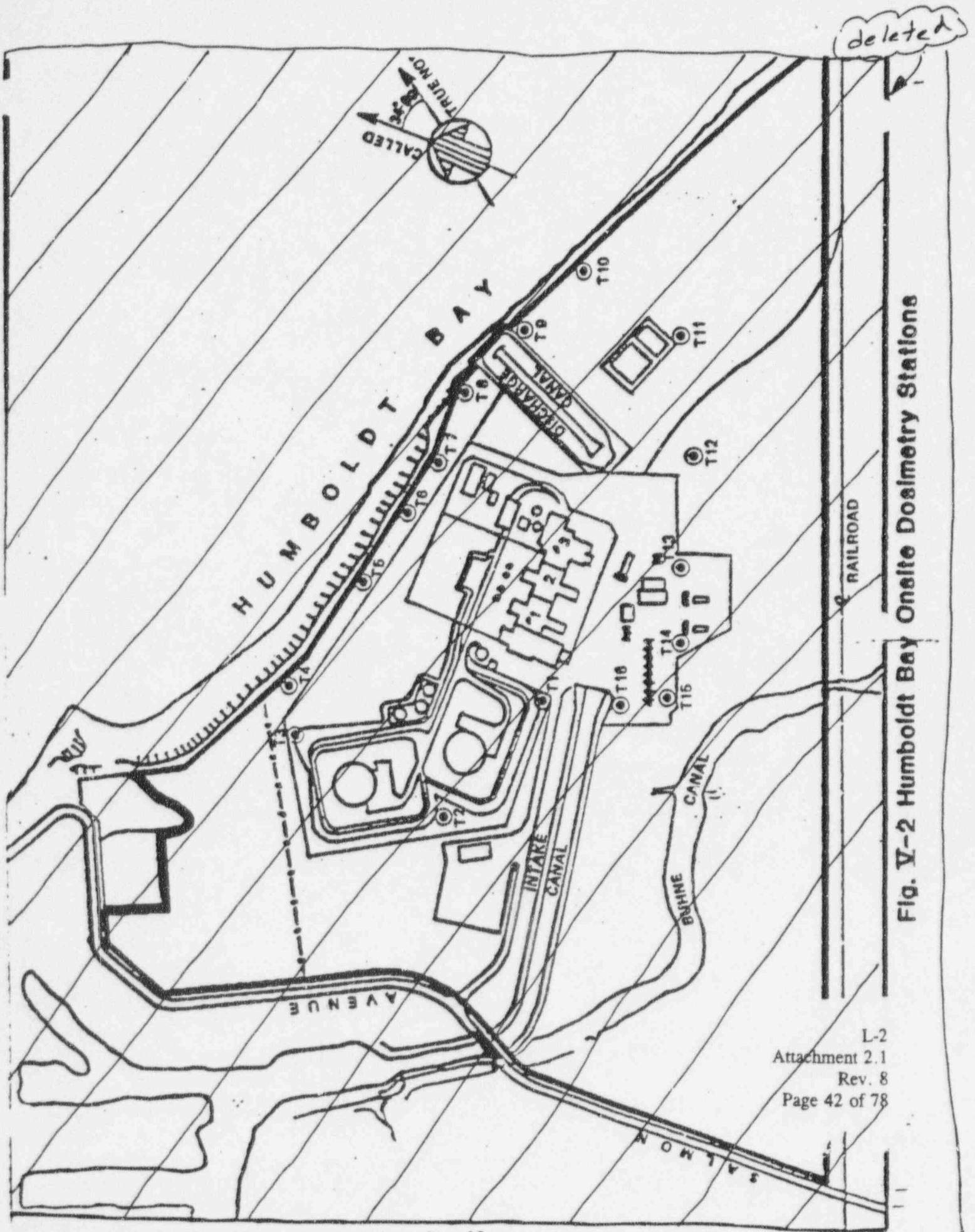
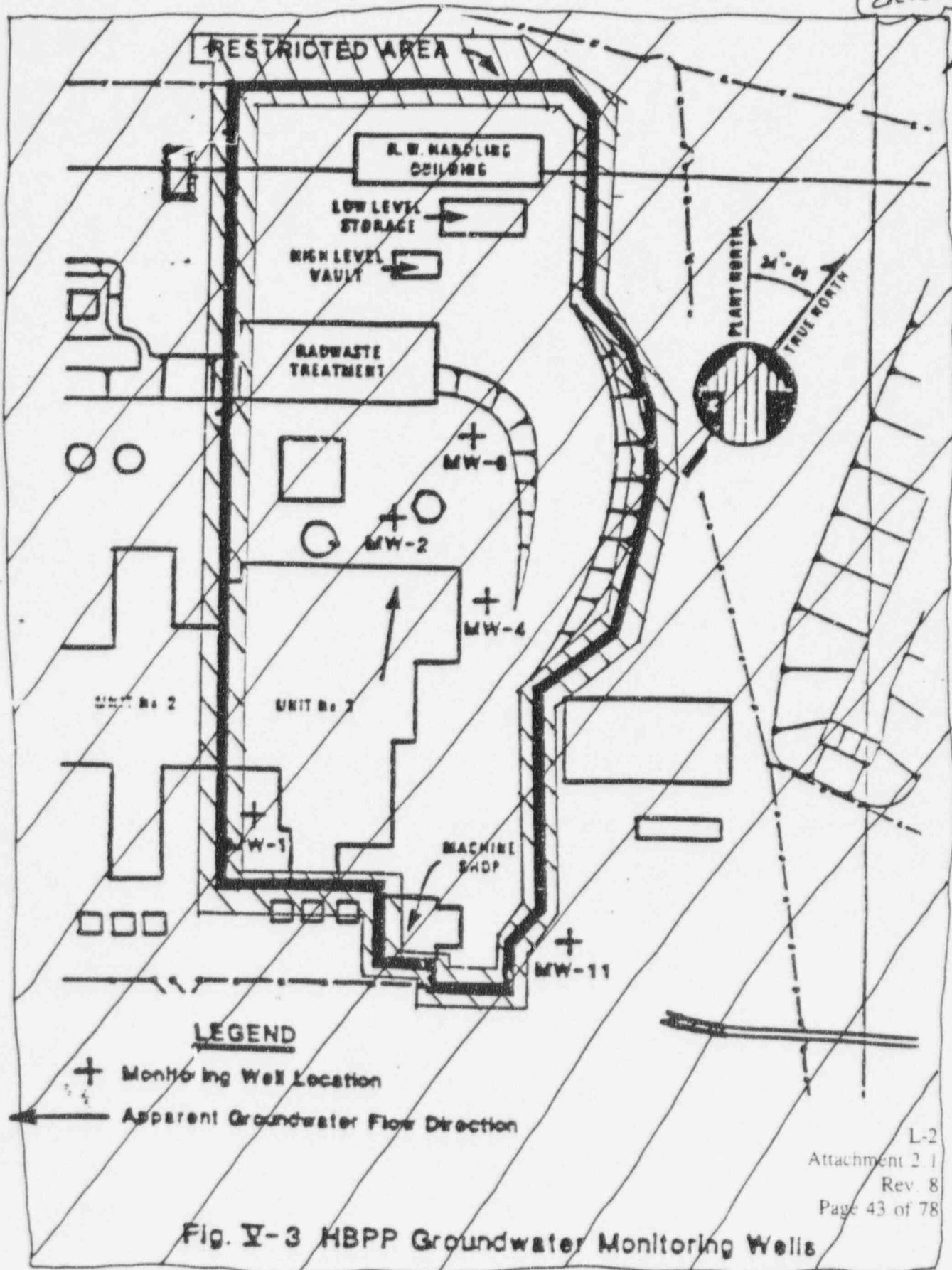


Fig. V-2 Humboldt Bay Onsite Dosimetry Stations

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VI. WASTE DISPOSAL SYSTEMS

A. DESIGN FEATURES

1. Liquid Radioactive Waste System

Contaminated or potentially contaminated liquid waste shall be collected in one of the following waste collection tanks or sumps:

- o Turbine building drain tank - 3,000-gallon capacity
- o Reactor equipment drain tank - 500-gallon capacity
- o Reactor caisson sump - 50-gallon capacity
- o Radwaste sump - 250-gallon capacity

If the radwaste discharge process monitor is OPERABLE, the contents of the reactor caisson sump may be automatically pumped to the outfall canal if periodic sample results determine that the water is not contaminated and if contamination is not suspected. Otherwise, the caisson sump shall be pumped to the liquid radwaste treatment facility. The contents of the remaining waste collection tanks or sumps shall be pumped to the liquid radwaste treatment facility.

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The liquid radwaste treatment system shall consist of the following principal equipment:

- o Waste receiver tanks (three) - 7,500-gallon capacity each
- o Treated waste hold tank (two) - 7,500-gallon capacity each
- o Radwaste filters (two) - maximum 25 microns with a capacity of 50 gpm each
- o Mixed bed radwaste demineralizer - 20-gpm nominal capacity
- o Radwaste concentrator and auxiliaries - designed to concentrate 7,500 gallons per week
- o Shielded concentrated waste storage tanks (two) - 5,000-gallon capacity each

Minimum treatment for any waste batch shall consist of filtration. Where further treatment is required, the following methods shall be available:

- o Removal of radioactivity by ion exchange
- o Concentration of radioactivity by evaporation

2. Solid Radioactive Waste System

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Spent demineralizer resin shall be sluiced to a shielded tank of 10,000-gallon capacity for long-term storage before ultimate offsite disposal. The excess liquid from this tank shall be drawn off periodically and treated in the liquid waste treatment facilities.

Other solid radioactive wastes shall be packaged and stored onsite for ultimate disposal offsite at an authorized disposal facility. Generally, solid radioactive wastes will be stored in either the 1,200-cubic-foot underground vault or in the radwaste handling building or in the low level storage building.

B. OPERATING LIMITS AND REQUIREMENTS

1. Liquid Radioactive Waste System

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- a. Radioactive waste discharges to Humboldt Bay shall not exceed the limits given in 10 CFR 20, Appendix B, Table II, column 2, on an instantaneous basis.
- b. The radiological inventory of wastes within the liquid radioactive waste treatment system shall not exceed 300 Ci.
- c. Water from the reactor caisson sump shall be sampled and analyzed monthly for total alpha, beta, and gamma activity. Average and maximum values shall be reported annually.

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- d. Each batch of wastes shall be sampled and analyzed before release to the discharge canal.
- e. Before a radioactive waste discharge is started, it shall be verified that the radioactive waste discharge line is connected to a unit with at least one circulating water pump in operation.
- f. The radiological inventory of wastes in outdoor tanks that are not capable of retaining or treating tank overflows shall not exceed 0.25 Ci.

2. Solid Radioactive Waste System

- a. The radiological inventory of wastes within the solid radioactive waste system shall not exceed 1000 Ci.
- b. Disposal of solid waste to a licensed burial site shall be performed in accordance with the requirements of 10 CFR Parts 20, 61, and 71, and other applicable requirements for transportation and disposal.
- c. Prior to shipment to a licensed burial site, liquid waste will be processed (e.g., solidified or absorbed) in accordance with a process control program which specifies acceptance criteria, test batch frequency, and remedial actions.

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3. Gaseous Effluents

Gaseous effluents shall not result in offsite ground level concentrations exceeding the limits given in 10 CFR 20, Appendix B, Table II, column 1, on an instantaneous basis.

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- g. Surveillance activities required to demonstrate compliance with the Technical Specifications
- h. Calibration of instrumentation used to demonstrate compliance with Technical Specifications
- 1. Shipping and disposal of radioactive materials

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2. Procedure Review

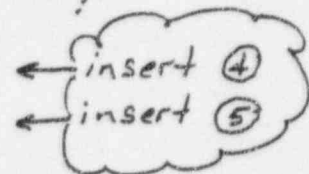
All procedures described in item 1 above, and changes thereto, shall be reviewed by the PSRC and approved by the Plant Manager prior to implementation, except as provided in items 3 and 4 below.

3. Procedure Changes

Rules shall be established that provide methods by which temporary changes can be made to approved procedures, including the designation of those persons authorized to approve such changes. Temporary changes that clearly do not change the intent of the approved procedure from the standpoint of nuclear safety may be approved by two members of the plant management staff, at least one of whom is a Certified Fuel Handler. Such changes shall be documented and, if appropriate, incorporated into the next revision of the affected procedure.

4. Emergencies Not Covered by a Procedure

In the event of an emergency not covered by an approved procedure, operations personnel shall be instructed to take action to minimize personnel injury and damage to the facility.



H.

SITE EMERGENCY PLAN

The Site Emergency Plan shall provide the necessary prearrangement and organization of personnel to deal effectively with emergencies at the Plant so as to minimize radiation exposure to Plant personnel and the general public. The plan shall describe the specific duties of Plant personnel in the event of an accident or any unplanned incident producing high radiation levels. Drills and exercises described in the Emergency Plan shall be performed to ensure that all Plant personnel are thoroughly familiar with the plan.

I.

SURVEILLANCE TESTING

Testing of system components, monitors, and other equipment to which these Technical Specifications apply shall be as described in Sections III through VI. Each surveillance test shall be performed within the specified time interval with:

- A maximum allowable extension not to exceed 25% of the test interval

- A total interval time for any three consecutive test intervals not to exceed 3.25 times the specified test interval

Appropriate tests shall also be performed following maintenance on these systems that could impair their operation.

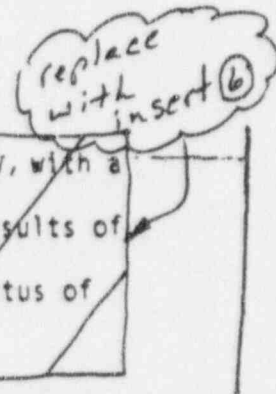


REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of 10 CFR, the following reports shall be submitted:

1. Annual Report

An annual report to the Regional Administrator, NRC Region IV, with a copy to the NRC Document Control Desk, shall describe the results of the environmental and facility radiation surveys and the status of the facility within 90 days of January 1 of each year.



2. Nonroutine Reports

- a. The NRC Operations Center shall be notified of emergency and nonemergency events in accordance with 10 CFR 50.72.
- b. Reportable events shall be reported in accordance with 10 CFR 50.73.

3. Annual Effluent Release Report

replace with
insert ①

The Annual Effluent Release Report covering the operation of the unit during the previous calendar year shall be submitted before April 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents released from the unit to unrestricted areas. The information submitted in the Annual Effluent Release Report shall be in accordance with 10 CFR 50.36a, Regulatory Guide 1.21 (Revision 1), dated June 1974, and Regulatory Guide 4.1 (Revision 1), dated April 1975.

4. Special Reports

If the calculated dose to any member of the general public exceeds the 40 CFR 190 limits, a Special Report shall be made to the Regional Administrator, NRC Region IV, within 30 days. This report shall include an analysis of the estimated dose received by a member of the public from uranium fuel cycle sources for the applicable consecutive 12-month period. The report shall also describe the corrective actions planned to reduce subsequent exposures and to prevent recurrence of the event. The Special Report shall include a request for a variance in accordance with the provisions of 40 CFR 190 and include the information specified in 40 CFR 190.11(b). Submittal of the report is considered a timely request, and variance is granted until NRC Staff action on the request is completed.

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RECORD RETENTION

1. Five-Year Retention

All records and logs relative to the following areas shall be retained for at least 5 years:

- a. Records and logs of normal SAFSTOR operations.
- b. Records and logs of principal maintenance activities, including inspection, repair, substitution, or replacement of principal items of equipment described in the Technical Specifications.
- c. Reportable Occurrence Reports
- d. Records of periodic checks, inspections, and calibrations performed to verify that surveillance requirements are being met.
- e. Records of radioactive shipments.
- f. Records of sealed source leak tests and results.
- g. Records of the annual physical inventory of all source material of record.

- g. Records of training and qualification for current members of the plant staff.
- h. Minutes of meetings of the PSRC and NSOC.
- i. Records of Quality Assurance activities required by the SAFSTOR Quality Assurance Plan.
- j. Records of reviews performed for changes made to procedures or equipment, or reviews of tests and experiments pursuant to the Final Hazard Summary Report (FHSR).

L

RADIATION PROTECTION PROGRAM

← insert 8

Radiation control procedures shall be prepared, approved, adhered to, and made available to all plant personnel. These procedures shall show permissible radiation exposure and shall be consistent with the requirements of 10 CFR 20. The radiation protection program shall be organized to meet the requirements of 10 CFR 20.

M

HIGH RADIATION AREA

1. Less Than or Equal to 1000 mr/hr

20.1601(a)

Pursuant to paragraph ~~20.203(c)(5)~~ of 10 CFR Part 20, in lieu of the "control device" or "alarm signal" required by paragraph

20.1601(a)

~~20.203(c)(2)~~. each high radiation area, as defined in 10 CFR Part 20, in which the intensity of radiation is equal to or less than 1000 mr/hr at ³⁰~~45~~ cm (¹²~~18~~ in.) from the radiation source or from any surface that the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area, and entrance thereto shall be controlled by requiring issuance of special work permits (SWPs). Individuals qualified in radiation protection procedures (e.g., Health Physics Technician) or personnel continuously escorted by such individuals may be exempt from the SWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates equal to or less than 1000 mr/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area:
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them.

- c. All individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified.

2. Greater Than 1000 mr/hr

VII.M.1

In addition to the requirements of Specification ~~VII.K.1~~, areas accessible to personnel with radiation levels greater than 1000 mr/hr at ³⁰45 cm (¹²18 in.) from the radiation source or from any surface that the radiation penetrates shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Foreman on duty or Health Physics supervision. Doors shall remain locked except during periods of access by personnel under an approved SWP which shall specify the dose rate levels in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of the stay time specification of the SWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

← insert 9
← insert 10

ATTACHMENT C

**GENERIC LETTER 89-01
IMPLEMENTATION MATRIX**

HBPP Implementation of Generic Letter 89-01 Guidance

GL 89-01 Disposition of Specifications and Administrative Controls Included Under the Heading of RETS in the Standard Technical Specifications			Disposition of Corresponding Current HBPP Technical Specifications (Not Drafted in Standard Technical Specification Format)		
STS Specification	Title	Disposition of Current Specification	HBPP Specification	Title	Disposition of Current Specification
1.17	Offsite Dose Calculation Manual	Definition is updated to reflect the change in scope of the ODCM.	I.B.4	Offsite Dose Calculation Manual	Definition is updated to reflect the change in scope of the ODCM.
1.22	Process Control Program	Definition is relocated to the PCP.	None	N/A	New definition added for a PCP as Specification I.B.3.
1.32	Solidification	Definition is relocated to the PCP.	None	N/A	Definition is added to the ODCM which contains the PCP.
3/4.3.3.10	Radioactive Liquid Effluent Monitoring Instrumentation	Programmatic controls are included in 6.8.4 g. Item 1). Existing specification procedural details are relocated to the ODCM.	V.A.2 V.B.2.a & b	Process Water Monitor	Programmatic controls are included in VII.F.1. Existing specification procedural details are relocated to the ODCM as appropriate.
3/4.3.3.11	Radioactive Gaseous Effluent Monitoring Instrumentation	Programmatic controls are included in 6.8.4 g. Item 1). Existing specification procedural details are relocated to the ODCM. Existing requirements for explosive gas monitoring instrumentation should be retained.	V.A.1 V.B.1.a, b, & c	Stack Gas Monitoring System	Programmatic controls are included in VII.F.1. Existing specification procedural details are relocated to the ODCM as appropriate. HBPP has no requirement for explosive gas monitoring instrumentation in SAFSTOR.
3/4.11.1.1	Liquid Effluents: Concentration	Programmatic controls are included in 6.8.4 g. Item 2) and 3). Existing specification procedural details are relocated to the ODCM.	VI.B.1.a	Liquid Radioactive Waste System	Programmatic controls are included in VII.F.2 & 3. Existing specification procedural details are relocated to the ODCM as appropriate.
3/4.11.1.2	Liquid Effluents: Dose	Programmatic controls are included in 6.8.4 g. Item 4) and 5). Existing specification procedural details are relocated to the ODCM.	None	N/A	Current Specifications do not have a limit for liquid effluent dose. New programmatic controls are included in VII.F.4 & 5. Procedural details are added to the ODCM.
3/4.11.1.3	Liquid Effluents: Liquid Radwaste Treatment System	Programmatic controls are included in 6.8.4 g. Item 6). Existing specification procedural details are relocated to the ODCM.	VI.A.1	Liquid Radioactive Waste System	Programmatic controls are included in VII.F.6. Existing specification procedural details are relocated to the ODCM as appropriate.

GL 89-01 Disposition of Specifications and Administrative Controls Included Under the Heading of RETS in the Standard Technical Specifications			Disposition of Corresponding Current HBPP Technical Specifications (Not Drafted in Standard Technical Specification Format)		
STS Specification	Title	Disposition of Current Specification	HBPP Specification	Title	Disposition of Current Specification
3/4.11.1.4	Liquid Holdup Tanks	Existing specification requirements to be retained.	VI.B.1.f	Liquid Radioactive Waste System	Existing specification requirements to be retained.
3/4.11.2.1	Gaseous Effluents: Dose Rate	Programmatic controls are included in 6.8.4 g. Item 3) and 7). Existing specification procedural details are relocated to the ODCM.	VI.B.3	Gaseous Effluents	Current Specifications are based on concentration at the site boundary. New programmatic controls are included in VII.F.3 & 7. Procedural details are added to the ODCM.
3/4.11.2.2	Gaseous Effluents: Dose-Noble Gases	Programmatic controls are included in 6.8.4 g. Item 5) and 8). Existing specification procedural details are relocated to the ODCM.	None	N/A	Current Specifications do not have a limit for dose from noble gas effluents. New programmatic controls are included in VII.F.8. Procedural details are added to the ODCM.
3/4.11.2.3	Gaseous Effluents: Dose-Iodine 131, Tritium, and Radioactive Material in Particulate Form	Programmatic controls are included in 6.8.4 g. Item 5) and 9). Existing specification procedural details are relocated to the ODCM.	None	N/A	New programmatic controls are included in VII.F.5 & 9. Procedural details are added to the ODCM. I-131 is not applicable to HBPP in the SAFSTOR decommissioning status.
3/4.11.2.4	Gaseous Effluents: Gaseous Radwaste Treatment or Ventilation Exhaust Treatment System	Programmatic controls are included in 6.8.4 g. Item 6). Existing specification procedural details are relocated to the ODCM.	None	N/A	Gaseous radwaste treatment is not applicable to HBPP in the SAFSTOR decommissioning status.
3/4.11.2.5	Explosive Gas Mixture	Existing specification requirements should be retained.	None	N/A	This Specification is not applicable to HBPP in the SAFSTOR decommissioning status.
3/4.11.2.6	Gas Storage Tanks	Existing specification requirements should be retained.	None	N/A	This Specification is not applicable to HBPP in the SAFSTOR decommissioning status.
3/4.11.2.7	Main Condenser (BWR)	Existing specification requirements should be retained.	None	N/A	This Specification is not applicable to HBPP in the SAFSTOR decommissioning status.

GL 89-01 Disposition of Specifications and Administrative Controls Included Under the Heading of RETS in the Standard Technical Specifications			Disposition of Corresponding Current HBPP Technical Specifications (Not Drafted in Standard Technical Specification Format)		
STS Specification	Title	Disposition of Current Specification	HBPP Specification	Title	Disposition of Current Specification
3/4.11.3	Solid Radioactive Wastes	Existing specification procedural details are relocated to the PCP.	VI.A.2 VI.B.2.b & c	Solid Radioactive Waste System	Existing specifications procedural details are relocated to the ODCM or PCP as appropriate.
3/4.11.4	Radioactive Effluents: Total Dose	Programmatic controls are included in 6.8.4 g. Item 11). Existing specification procedural details are relocated to the ODCM.	None	N/A	New programmatic controls are included in VII.F.10. Procedural details are added to the ODCM as appropriate.
3/4.12.1	Radiological Environmental Monitoring: Monitoring Program	Programmatic controls are included in 6.8.4 h. Item 1). Existing specification procedural details are relocated to the ODCM.	V.A.4 V.A.6 V.B.4 V.B.6.a, b, & c	Offsite Environmental Monitoring Stations, Onsite Environmental Monitoring Stations	Programmatic controls are included in VII.G.1. Existing specification procedural details are relocated to the ODCM as appropriate.
3/4.12.2	Radiological Environmental Monitoring: Land Use Census	Programmatic controls are included in 6.8.4 h. Item 2). Existing specification procedural details are relocated to the ODCM.	None	N/A	This Specification is not applicable to HBPP in the SAFSTOR decommissioning status. The Environmental Report submitted as Attachment 6 to the SAFSTOR LAR established baseline conditions for the SAFSTOR period.
3/4.12.3	Radiological Environmental Monitoring: Interlaboratory Comparison Program	Programmatic controls are included in 6.8.4 h. Item 3). Existing specification procedural details are relocated to the ODCM.	None	N/A	New programmatic controls are included in VII.G.2. Procedural details are added to the ODCM.
5.1.3	Design Features: Site Map Defining Unrestricted Areas and Site Boundary for Radioactive Gaseous and Liquid Effluents	Existing specification requirements should be retained.	II.B	Plant Areas	Existing specification requirements are retained.

GL 89-01 Disposition of Specifications and Administrative Controls Included Under the Heading of RETS in the Standard Technical Specifications			Disposition of Corresponding Current HBPP Technical Specifications (Not Drafted in Standard Technical Specification Format)		
STS Specification	Title	Disposition of Current Specification	HBPP Specification	Title	Disposition of Current Specification
6.9.1.3	Reporting Requirements: Annual Radiological Environmental Operating Report	Specification simplified and existing reporting details are relocated to the ODCM.	VII.H.1	Annual Report	Specification simplified and existing reporting details are relocated to the ODCM.
6.9.1.4	Reporting Requirements: Serr: Annual Radioactive Effluents Release Report	Specification simplified and existing reporting details are relocated to the ODCM or PCP as appropriate.	VII.H.3	Annual Effluent Release Report	Specification simplified and existing reporting details are relocated to the ODCM as appropriate.
6.13	Process Control Program	Specification requirements are simplified.	None	N/A	A new Specification VII.N is added to incorporate GL 89-01 guidance.
6.14	Offsite Dose Calculation Manual	Specification requirements are simplified.	None	N/A	A new Specification VII.O is added to incorporate GL 89-01 guidance.
6.15	Major Changes to Liquid, Gaseous, and Solid Radwaste Treatment Systems	Existing procedural details are relocated to the ODCM or PCP as appropriate.	None	N/A	Procedural details are added to the ODCM as appropriate to incorporate GL 89-01 guidance.