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OUTGOING LTR. NO.

29791-R1

INCOMING LTR. NO.

29791

ACTION

PROSSER

HEINE

REPLY DUE

3-15-86



Rockwell Hanford Operations  
P.O. Box 800  
Richland, WA 99352

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In reply, refer to letter 29791-R1

DIST:

LTR  
ENCL  
APPR.

Albaugh, W.F. X X X

Bartholomew, D.C.

BeWofette, M.

Covey, J.M.

Crawford, A.C. X

Deichman, J.L.

DiPal, C.V. X X

Donohue, J.W.

Fitch, L.R.

Gilliland, J.C.

Gimera, R.J.

Grube, R.S. X

Heineman, R.E.

Larson, M.P.

Lorenzini, P.G. X

McDermott, R.J.

Patterson, J. X X X

Perkins, J.D.

Prosser, R.D. X

Roosher, J.H. X

Weil, V.R.

Wedrich, D.D.

Zahn, L.L.

Contract Administrator X

Central Files X

DOF HEINE X

LL P. B. X X

GT D. B. X X

G.C. SNIREY X

RA KALLER X

J. H. T. X

B. R. G. X X

J. C. F. X X

S. A. W. X

B. R. R. X

J. T. X X

D. G. H. X X

K. E. P. X

J. H. E. X

R. A. W. X

R. S. G. X

R. R. G. X

4 6000-117 (12-85)

Mr. R. E. Gerton, Director  
Environment, Safety and Health Division

Mr. J. D. White, Director  
Waste Management Division Department of Energy  
Richland Operations Office  
Richland, Washington 99352

Gentlemen:

RESPONSE TO COMPLIANCE ORDER DE-85-667  
(Contract DE-AC06-77RL01030)

Reference: Letter, February 6, 1986, Ronald E. Gerton to General Manager,  
Rockwell Hanford Operations, "Compliance Order No. DE-85-677"

Rockwell Hanford Operations (Rockwell) has reviewed the five compliance instructions provided by the Washington Department of Ecology in Compliance Order DE-85-667. Listed below are the schedules for achieving and documenting compliance with the Order.

- (1) By April 1, 1986, install an aqueous makeup unit (AMU) high-level alarm system in the central control room.

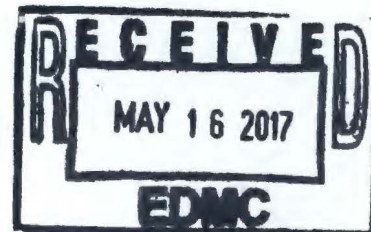
An Aqueous Makeup (AMU) tank high-level alarm system is being installed for five tanks. This installation includes both high-level alarming capability and strip chart recorders for real-time monitoring of liquid levels. The system is designed to allow central instrumentation monitoring during transfers from the bulk chemical storage tanks located in the 211-A area to receiver tanks in the AMU. These five tanks were identified for initial alarm installation because: 1) Overflow of 211-A to AMU transfers would result in discharging significant amounts of undiluted chemicals to the chemical sewer; 2) the transfers are from large bulk storage tanks into smaller capacity AMU receiver tanks; and 3) routine plant use of these materials result in frequent transfers between 211-A and AMU. These five alarms will be operable prior to April 1, 1986. Concurrently, design activities are in progress addressing high-level alarms for all other AMU tanks and an overflow collection system. A schedule for this remaining work is being developed, and will be presented by March 15, 1986.

- (2) By April 1, 1986, install a pH meter in the chemical sewer system, downstream from the AMUs and the 211-A building, which alarms in the central control room. The pH meter(s) shall be calibrated such that pH values of less than 6.0 and greater than 8.0 shall signal the alarm.

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A pH meter with alarm and readout capabilities in the PUREX central control room is now installed. The alarm is currently set at pH 5 and pH 11. Utilizing alarm set points of 6 and 9 would cause numerous alarms due to routine fluctuations in pH of the chemical sewer. Set points of 5 and 11 will provide timely indications of significant changes in pH and allow adequate time to control the process.

- (3) Immediately upon receipt of this Order, implement procedures which require process operators to continuously monitor AMU tanks during material transfers. This shall include techniques which improve communication lines between employees during material transfers, operations, and shift changes.

Procedures were implemented in July 1985, requiring continuous monitoring during material transfers from 211-A to the AMU. Additional operators are now assigned to the AMU to specifically monitor all material transfers. The additional labor costs of approximately \$200,000 will be integrated into the overall Chemical Processing budget, which is scheduled for review with the Department of Energy (DOE) Program Office in the next two weeks. It should be noted that this will substantially reduce the potential for chemical releases, and that it is only an interim measure until permanent design changes are installed. These changes could include tank high-level alarms, overflow collection systems, and other engineered barriers and features. Additionally, a job turn-over procedure was implemented in October 1985 that provides a complete status turn-over of all operations, including AMU transfers, when operator relief is made.

- (4) By April 1, 1986, develop, implement, and submit to the Department of Ecology, waste management methods that will be utilized to manage unwanted, discarded, or otherwise spent waste chemicals from the aqueous makeup units. This submittal shall ensure and document that the intentional discharge of these materials has ceased and that all Federal and State regulatory requirements are met. This report shall furthermore document the procedures that DOE has taken to minimize the accidental or negligent release of waste chemicals into sewers.

PUREX operating management has directed that no further intentional releases of regulated chemicals to the chemical sewer will be made from the AMU area. Documentation to this effect will be provided to DOE-Richland Operations Office (RL) by March 15, 1986. The report described in response to Item 5 below will identify the proposed actions and implementation schedules to minimize the accidental or negligent release of waste chemicals into the sewers.

- (5) By May 1, 1986, submit to the Department of Ecology a report which identifies engineering (waste management) options that preclude the





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release of waste chemicals into the chemical sewers. This report shall contain decision schedules which identify the issues involved and the point in time when the selection, implementation, and completion of the necessary engineering and construction will take place.

Rockwell has initiated efforts to identify engineered barriers and controls to prevent chemical spills from reaching the PUREX chemical sewer. An engineering study is under way to determine an appropriate design concept for an AMU spill containment and treatment system. This study addresses the collection and reuse of chemicals as well as the neutralization and proper disposal of out-of-specification chemical batches. A method of transferring non-reusable, non-neutralizable chemicals to drums for shipment to storage and disposal facilities is also being evaluated in this study. A report based on the conclusions and recommendations of this study will be submitted to DOE-RL by March 15, 1986. The report will identify the methods to be used to prevent unneutralized AMU chemicals from reaching the chemical sewer and the schedule for implementation.

Should you require further information concerning this matter, please contact Mr. W. F. Heine on 373-1184 or Ms. L. L. Powers on 373-4981.

Very truly yours,

J. F. Albaugh, Director  
Safety and Quality Assurance

W. F. Heine, Program Manager  
Environmental Control Programs

JFA/WFH/tat

cc: P. E. Rasmussen - DOE-RL