



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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March 4, 2008

Mr. David Brockman, Manager  
United States Department of Energy  
Richland Operations Office  
P.O. Box 550, MSIN A7-50  
Richland, Washington 99352

**RECEIVED**  
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**EDMC**

Mr. Con Murphy, President  
Fluor Hanford, Incorporated  
P.O. Box 1000, MSIN H5-20  
Richland, Washington 99352

Re: Notice of Violation (NOV) and Concerns from the Dangerous Waste Compliance Inspection of the T Plant Complex (T Plant) conducted June through August 2007

Dear Mr. Brockman and Mr. Murphy:

Beginning on June 26, 2007 the Department of Ecology conducted an inspection of dangerous waste management activities being performed within the T Plant, operated by Fluor Hanford, Inc. (FH) in the 200 West Area of the Hanford Site. The T Plant operations are instrumental in meeting various waste designation and treatment schedules and milestones.

Ecology's inspection has identified one violation of Washington Administrative Code (WAC), Chapter 173-303, Dangerous Waste Regulations, and three concerns regarding ongoing dangerous waste management within the T Plant. This letter provides the violation, required action, concerns, and resolutions.

Ecology is identifying the concerns to notify the United States Department of Energy-Richland Office (USDOE-RL) and FH of potentially inadequate practices at T Plant. If not remedied these practices at T Plant may evolve into violations of environmental regulatory requirements and then be subject to formal enforcement actions by Ecology.

## **VIOLATION**

### **1) WAC 173-303-070, *Designation of Dangerous Waste***

Owners and operators of treatment, storage, and disposal facilities (TSD) are required to ensure they have adequate knowledge to safely store dangerous waste at their facility. WAC 173-303-170 requires generators of solid wastes to conduct designations to determine if a solid waste is dangerous or extremely hazardous waste by the requirements of WAC 173-303-070 through 100. Two previous inspections, conducted in 2000 and 2005, cited concerns with inadequate waste designation at T Plant. The current inspection of T Plant again identified waste designation problems. USDOE-RL and FH failed to meet the requirements for designating wastes as follows:

*WAC 173-303-070(3) requires waste designations be conducted to determine if a waste is dangerous or extremely hazardous in order to properly manage and dispose of the waste. Proper waste designation includes identification and application of appropriate waste codes, and identification of major risks.*

*USDOE-RL and FH failed to meet these requirements in the following ways:*

- Liquid gasoline, kerosene, and petroleum based ignitable wastes were discovered stored in 5-gallon plastic carboy containers within the 214-T building. In over ten months, these materials had not been designated per WAC 173-303-070 through 100.*
- Container # RHZ-241-A19182 has been in storage for many years without designation. Solid Waste Information Tracking System (SWITS) information for this container listed a flash point as < 38° F, indicating a D001 ignitable hazardous waste.*
- The contents inventory sheet for container # 221T-97-0031PX (also identified as # 9521569) lists a total of 28 inner containers of "unknown" contents. The SWITS 310 report documented this 55-gallon drum as DW (dangerous waste); however, no waste codes were applied to the drum's contents. Also, documentation indicated that the last addition to the drum was 1/30/1998, and that it was "full." It appeared this drum containing dangerous waste was being stored with incomplete designation since that time.*

### **Required Action:**

USDOE-RL and FH must submit a report to Ecology identifying containers of dangerous and mixed waste that have been in storage at T Plant since before January 1, 2007. This report must include the container identification number, waste type, activity(s) needed and estimated schedule to prepare for each container for disposal.

This report must be provided to Ecology by May 10, 2008.

## **CONCERNS**

### **1) WAC 173-303-200, *Accumulation***

T Plant generates dangerous or mixed waste as a result of operations, maintenance, and cleanup activities conducted within the facility. T Plant utilizes "accumulation" containers to store this waste; however, some accumulation containers at T Plant have not had additions for almost 10 years. Per WAC 173-303-200, a large quantity generator may accumulate waste on-site without a permit for up to 90 days or in satellite accumulation areas so long as the requirements of WAC 173-303-200 are met. Once the 90-day accumulation period has been attained, or a satellite accumulation container is full the containers must be fully designated per WAC 173-303-070 through 100 and transferred to a permitted treatment, storage, or disposal facility.

*Ecology is concerned that T Plant is "accumulating" waste for extended periods of time without following WAC 173-303-200 requirements, or conducting proper designation of the waste and transferring it to a permitted treatment, storage or disposal facility.*

*Examples of this accumulation follow:*

- *Accumulation containers 221T-98-000016, 221T-98-000015 SWPO-99-000232, 221T-97-0031PX, 221T-02-000087, 221T-95-000066, and 9406680 have been managed as accumulation containers beyond 90 days (some for 5 years) and after the process that generated the waste has ceased. These containers were also not designated per WAC 173-303-070 through 100.*

### **Resolution:**

Accumulation containers of non-Transuranic dangerous or mixed waste within the T Plant Complex should be managed according to the requirements and provisions of WAC 173-303-200 (*Accumulation*), or be designated per WAC 173-303-070 through 100 and transferred into permitted storage per the requirements of WAC 173-303-300. If this waste is to be transferred to T Plant's TSD for storage, it must meet the T Plant waste acceptance criteria and waste analysis plan.

### **2) WAC 173-303-630, *Use and Management of Containers***

USDOE-RL and FH failed to label containers of dangerous waste in a manner which adequately identifies the major risk(s) associated with the contents or to ensure labels are not obstructed, obscured or otherwise unreadable per *WAC 173-303-630(3)*.

*WAC 173-303-630(3) requires the owner or operator to ensure each container of dangerous waste accumulated (stored) on-site be labeled to adequately identify the major risk(s) associated with the contents of the container for employees, emergency response personnel, and the public. (Note: If there is already a system in use that performs this function in accordance with local, state, and federal regulations then such system will be adequate.) The owner/operator must affix labels upon transfer of dangerous wastes from one container to another. The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320.*

*Ecology is concerned that some of the containers of dangerous waste in storage at T Plant have inaccurate labeling which may not identify or reflect the waste inside the containers. The inspection found the following examples of faulty or misleading labeling at T Plant:*

- *Five 5-gallon carboys and two 250-ml bottles containing flammable dangerous wastes were not labeled for major risks or as hazardous waste. These containers had been in storage for at least ten months without proper labeling.*
- *Two containers were observed stored in T Plant's storage locations without hazardous waste or major risk(s) labeling.*
- *Waste containers observed in storage at T Plant with deficient labeling include the following:*
  - *Container # 9401299 had a "toxic" label affixed to it that FH said should not be there. Contents of this container are unverified and not clear in the documentation.*
  - *Container RHZ-241-A18597 had labeling indicating the material inside was "Liquid Organic Waste," "flammable liquid," and FP "79° F." FH personnel said none of these labels depicted the waste in the container. The Solid Waste Information Tracking System information for this container identified the waste as lab packed with a flash point of < 63° F.*
  - *Container # 9404362 was labeled as toxic but did not have hazardous waste labeling.*
  - *Container# 222S-92-000201 was labeled with < 100° F; however, the SWITS data indicated the waste had a flash point of < 60° F. The container did not have an ignitable label on it.*
  - *Container # 9701648 was observed without major risks labeling affixed to the container.*
- *Labeling and container identification and tracking numbers on over two hundred hazardous waste containers in outdoor storage were obscured by opaque yellow plastic tarps that completely covered the drums.*

**Resolutions:**

- 1) USDOE-RL must conduct a review of all containers containing dangerous waste currently in storage at T Plant to identify all dangerous waste containers with deficient, inaccurate, and misleading labeling. The review must include visually inspecting for damaged or faded labels, the appropriate application of all the major risks identification, and misleading labeling on containers that no longer reflect the status of the waste inside. Ecology requests that written notification be provided by May 10, 2008 confirming the review was completed.
- 2) For all containers in storage at T Plant, USDOE-RL and FH must store containers in a manner that will allow the public, employees, and emergency personnel to observe container identification numbers, hazardous waste and major risk(s) labeling at all times. Ecology requests that written notification be provided by May 10, 2008 confirming the review was completed.

**3) WAC 173-303-330, Personnel Training**

WAC 173-303-330 requires a training program and training plan for facilities managing dangerous wastes. T Plant's Environmental Training Program Description, Revision 3, dated November 8, 2006, states "a course number is non-applicable for on-the-job (OJT) training. Therefore, a Resource Conservation and Recovery Act training record in accordance with WAC 173-303-330(3) will not be generated when those activities are conducted provided the elements are described in the Dangerous Waste Training Plan."

*During the inspection, it was debated by FH that OJT records were not required and were not under the authority of Ecology to review records of training completion. T Plant's Dangerous Waste Training Plan requires certain OJT be completed, therefore documentation of required OJT completion is required per WAC 173-303-330(3)*

**Resolution:**

Per WAC 173-303-330(1), USDOE-RL and FH must provide a program of classroom instruction or OJT training for facility personnel that manage dangerous wastes. The program must be consistent with the requirements of WAC 173-303-330(2) and specify that all required training, including applicable OJT must be documented and retained. The record of

completion of the required training must be maintained in the facility's operating record. USDOE-RL and FH must revise the T Plant Dangerous Waste Training Plan as necessary to ensure that all documentation of all required training is being retained.

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USDOE-RL may request additional time from Ecology to complete the required actions so long as the request thoroughly explains the need for additional time and provides a schedule of when the actions will be completed.

Should you have any questions please contact me at 509-372-7911.

Sincerely,



Steve Szendre  
Compliance Inspector  
Nuclear Waste Program

dbm

cc: Nick Ceto, EPA  
Stuart Harris, CTUIR  
Gabriel Bohnee, NPT  
Russell Jim, YN  
Susan Leckband, HAB  
Ken Niles, ODOE  
Administrative Record: T Plant T-2-7  
Environmental Portal