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**Findings Regarding the Exit of a
Contaminated Vehicle from the Fukushima
Daiichi NPS**

July 19, 2013

Tokyo Electric Power Company

1. Event and time-line

■ Event

On June 29, 2013, a ready-mixed concrete truck (hereinafter “concrete truck” or “the truck”) that was in the Fukushima Daiichi NPS for work on the premises passed through the main gate while still having contamination on the upper part of its rear bumper, and exited the power station. (Already notified)

■ Time-line

- June 29 12:48 Concrete truck enters the Fukushima Daiichi NPS for work on the premises (1st time)
- 13:08 First work on the premises completed
- Around 13:20 A contamination test found contamination on the upper part of the rear bumper of the truck
- 13:26 The truck leaves the power station without being decontaminated (1st time)
- 14:34 The truck re-enters the power station after loading concrete in order to conduct work on the premises (2nd time)
- 15:05 As the truck came to take the contamination test, a worker at the contamination test site confirmed that the vehicle had exited the power station after the previous contamination test without being decontaminated
- 15:05 TEPCO (power station headquarters) is contacted about the event
- 15:07 A contamination test is conducted on the truck (2nd time)
- 15:15 The truck exits the power station after decontamination (2nd time)

2. Contamination conditions of the cement mixer truck



Concrete with contamination attached was found adhered on the upper part of the rear bumper of the concrete truck.



The range of contamination was approximately 10cm × approximately 10cm

Enlarged view of the contaminated area

3. Flow of vehicle exiting the premises without being decontaminated (contamination confirmed)

As the truck was found to be contaminated at the contamination test site, the worker at the contamination test site handed the “contamination test application and confirmation form” to the driver without entering the confirmation time or stamping the confirmation seal, and indicated to the driver to go to the decontamination lane near the contamination test site.



The driver of the truck mistakenly assumed that he could exit as he had received the “contamination test application and confirmation form,” and left the contamination test site without noticing the guidance to the decontamination lane, and submitted the documents at the contamination test check station (main gate).



The checker at the contamination test check station (main gate) was aware that vehicles without a confirmation time or confirmation stamp on the “contamination test application and confirmation form” should not exit, but overlooked the items that should be checked, and as the documents were received (time is entered outside the box), the truck exited the power station.

Contamination test application and confirmation form

When decontamination (contamination confirmed) has not been implemented

確認日時	25年6月29日	17時26分
検査所名称 (道路コードも明記)	国道沿線富岡核燃料	
ふりがな	[Redacted]	
氏名	[Redacted]	
車両番号	とちぎ・福島・(08)	
備考	企業名: [Redacted] 工場 連絡先: [Redacted]	

確認者 東京電力株式会社
問合せ先: 福島第一原子力発電所 保安班

Confirmation time is not entered

No confirmation stamp

When contamination is confirmed

確認日時	25年6月29日	15時07分
検査所名称 (道路コードも明記)	国道沿線富岡核燃料	
ふりがな	[Redacted]	
氏名	[Redacted]	
車両番号	とちぎ・福島・(08)	
備考	企業名: [Redacted] 工場 連絡先: [Redacted]	

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*A contamination test (after decontamination) is conducted, and if contamination is not found, the confirmation time is entered and the confirmation seal is stamped.

4. Cause

- The driver of the truck mistakenly assumed that he was able to exit the power station after receiving the “contamination test application and confirmation form” at the contamination test site, and exited the power station without stopping by the decontamination lane.
- The checker at the contamination test check station (main gate) was aware that verification of the confirmation time and confirmation stamp was required among the items listed on the “contamination test application and confirmation form”, but overlooked the items that needed to be checked, and allowed the truck, which had a “contamination test application and confirmation form” with no confirmation time or confirmation stamp, to exit the power station.
- The worker at the contamination test site and the checker at the contamination test check station (main gate) both failed to report the event as they each thought the other had reported the event to the power station headquarters, and thus the notification to the power station headquarters was delayed.

5. Investigation of similar cases

→ Based on the causes of this event, similar cases were investigated

■ Investigation method

As the confirmation time is entered on the “contamination test application form” after completion of the contamination test, similar cases were investigated by checking (double-checking) whether the confirmation time had been entered on the contamination test application form, and those without a confirmation time were cross-checked against the database in which the contamination test measurement results were registered (hereinafter “database”).

■ Investigation results

- ✓ Target period: August 10, 2012 – June 29, 2013
- ✓ Number of cases that were checked: Approximately 160,000 cases (159,838 cases)
- ✓ Period of investigation: July 4, 2013 - July 10, 2013

Investigation findings confirmed that no similar events had occurred

● There were six application forms with no confirmation time entered, and 22 days worth of cases with no “contamination application form,” but it was confirmed using the database that all had exited without attaining the screening level.

6. Recurrence prevention measures

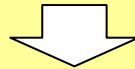
- For vehicles requiring decontamination, the “contamination test application and confirmation form” will be not be handed directly to the driver, but will be handed from the worker at the contamination test site to the worker at the decontamination area, and will not be returned to the driver until decontamination of the vehicle is complete.
- Workers at the contamination test check station (main gate) will be trained again in the method of verifying vehicles that cannot exit from the site, such as checking that the driver has the “contamination test application and confirmation form” and checking for incomplete entries on the form. In addition, the method for verifying vehicles that cannot exit from the site will be posted at the contamination test check station (main gate).
- For problematic events that occur on site, “events requiring notification” and “point of contact” will be clearly established, and all persons concerned will be told that the site manager should promptly notify the power station headquarters when a problem occurs.

7. Future site exit procedures based on the recurrence prevention measures

(1) If contamination is found on a vehicle at the contamination test site, the worker at the contamination test site shall lead the vehicle to the decontamination lane. At this time, the “contamination test application and confirmation form” will not be handed to the driver directly; the measurement employee at the contamination test site will hand it to the worker at the decontamination area.



(2) When decontamination at the decontamination area is complete, the worker at the decontamination area will return the “contamination test application and confirmation form” that has the confirmation time and confirmation stamp indicating complete decontamination to the driver of the vehicle.



(3) The checker at the contamination test check station (main gate) will check that the “contamination test application and confirmation form” has the confirmation time and confirmation stamp before accepting the documents and permitting the vehicle to exit the site.