United States Environmental Protection Agency
Region I
POLLUTION REPORT

Date: Wednesday, September 3, 2008
From: Dan Wainberg

Subject: Final POLREP
Lawrence Train Derailment
Pan Am Rail Yard, Lawrence, MA
Latitude: 42.6917000
Longitude: -71.1578000

POLREP No.:	2	**Site #:**	
Reporting Period:		**D.O. #:**	
Start Date:	5/8/2008	**Response Authority:**	CERCLA
Mob Date:	5/8/2008	**Response Type:**	Emergency
Demob Date:	5/9/2008	**NPL Status:**	Non NPL
Completion Date:	9/3/2008	**Incident Category:**	
CERCLIS ID #:		**Contract #**	
RCRIS ID #:			

Site Description
At approximately 1730 on 8 May 2008, the Emergency Planning and Response Branch Phone Duty Officer received a National Response Center (NRC) report indicating a release of sodium chlorate (UN 1495) from a derailed train car at the PanAm rail yard in Lawrence, MA.

The Phone Duty Officer spoke with Massachusetts Department of Environmental Protection (MassDEP)emergency responder. According to MassDEP an approximately 2000ft by up to ten foot wide line of the sodium chlorate powder had been released from the damaged railcar as it travelled along the track inside the rail yard and stopped just after crossing Andover Street. MassDEP further reported that PanAm had hired Enpro Services to perform an assessment and cleanup. At the time of the call, there were no evacuations or injuries; however, the responder reported that some nearby residences may be evacuated shortly as a precaution.

After telephone coordination with MassDEP, the Phone Duty Officer dispatched OSC Wainberg to the incident at approximately 1850.

**Sodium chlorate is a white, crystalline solid. It is often utilized to manufacture dyes and explosives, in paper pulp processing, leather processing, and as a herbicide. Sodium chlorate can cause eye and skin irritation or burns. Breathing sodium chlorate can irritate the nose and throat. High levels can interfere with the blood's ability to carry oxygen. Sodium chlorate is a strong oxidizer and may ignite combustibles (e.g. wood, paper, oil).*

Current Activities
Since POLREP No. 1, MassDEP has continued to monitor clean-up activities and reported the following:

- On 14 and 15 June 2008, the Lawrence Fire Department responded to minor flare-ups that occurred along the railroad tracks.
- On 16 June, Enpro conducted a bench scale treatment of a small impacted area using a sodium thiosulfate solution. The treatment did not create excessive heat and no elevated levels of Oxygen or Chlorine Dioxide were observed with monitoring instruments.
- Following the bench scale treatment, Enpro conducted the initial full-scale sodium thiosulfate treatment of soils impacted by the sodium chlorate release. Post treatment sample results indicated that treatment was generally successful in reducing the concentrations of sodium chlorate; however, several discreet areas required additional treatment. Since the initial treatment no flare-ups have occurred.
- During the week of 30 July, Enpro conducted a second round of treatment. Post treatment sampling results indicated that further reductions in sodium chlorate concentrations occurred.

Planned Removal Actions
None.

Next Steps

- None for EPA. With Flare-ups no longer an issue and MassDEP no longer needing technical assistance from either the OSC or EPA ERT, EPA emergency response will not be actively involved in the remediation unless conditions change or MassDEP requests further assistance.
- MassDEP will continue to provide oversight of the RPs remediation activities until the site can be closed out.

response.epa.gov/lawrencetrainderailment