

**Responses Submitted by Chevron to Follow-up Questions
from the June 15, 2010 Hearing by the
House Subcommittee on Energy and Environment**

The Honorable Jim Matheson

I request that you respond to the following questions regarding the June 11, 2010 oil leak in a pipeline in Salt Lake City, Utah, which is owned by the Chevron Pipe Line Company. The spill resulted in approximately 33,000 gallons of oil being spilled from the broken pipeline into the Red Butte Creek in northern Salt Lake City. This creek feeds into the Jordan River, which is the main waterway that drains the Jordan River Watershed into the Great Salt Lake.

1. Chevron officials have said this is a very unusual accident. Was a situation like this accounted for in Chevron's pipeline safety plan? How can you guarantee a similar leak will not happen along other portions of your pipeline?

Response:

The Rangely pipeline is a 10 inch pipeline that extends 182.5 miles from Rangely, Colorado to Salt Lake City, Utah and traverses mountainous terrain with elevations as high as 10,000 feet. The incident is considered unusual in the sense that most pipeline breach events result from a third party striking the pipeline, corrosion, or mechanical failure of pipeline equipment. These typical factors do not appear to have contributed to this incident. In accordance with federal, state and local requirements, Chevron Pipe Line Company (CPL) maintains a number of plans to promote the safe operation of its pipelines, to reduce the risk of releases from its pipelines, and to implement emergency response procedures to protect human health and the environment in the event of a release from one of its pipelines.

Since the incident, CPL has taken several additional steps to promote the integrity of and reduce the potential for a release from the Rangely pipeline.

- CPL is actively participating in the Unified Command which was established to address this incident and includes representatives from the US Environmental Protection Agency, Utah Department of Environmental Quality (DEQ), City of Salt Lake and the Salt Lake Valley Health Department.
- CPL's pipeline repairs were observed, inspected and approved by the U.S. Department of Transportation (DOT) Pipeline & Hazardous Materials Safety Administration.
- CPL conducted a pipeline pressure test in excess of two times the typical operating pressure of the pipeline before reinitiating pipeline operations. The test protocol was approved by the Unified Command.
- CPL performed an aerial inspection along the Rangely pipeline before reinitiating operations.
- CPL has implemented various control center measures to enhance its leak detection capabilities.
 - CPL installed Telvent Supervisory Control And Data Acquisition's (SCADA) Pipe Line Monitoring software package which has been configured to provide enhanced computer-based leak detection and alarming.
 - CPL implemented new operating data trend reporting to provide controllers with visual trend analysis of leak detection data to facilitate earlier identification of potential leaks.
 - CPL has established tighter parameters to identify deviations between input and outlet volumes ("loss deviations"), which may be indicators of a potential leak, and tighter shut-in requirements. CPL implemented a line loss deviation cause log sheet to ensure controllers document the deviation and take appropriate action. A process has been established to escalate questionable line loss deviations to appropriate supervisors for further action.
- CPL is also reviewing additional longer-term improvement opportunities: For instance:

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- CPL plans to install a motor-operated valve on the up-gradient side of Red Butte Creek.
- CPL plans to complete a follow up “Smart Pig” Inspection of the Rangely pipeline within the next six months which is three years ahead of the required schedule.
- CPL plans to review and continue in the future to explore new technologies which might be applied to simplify Rangely pipeline operations and oversight.

CPL and other members of the American Petroleum Institute and the Association of Oil Pipe Lines are supporting Congress’s proposal to introduce legislation that would enhance state OneCall program standards, including a single point for enforcement of OneCall requirements and increased penalties for failure to follow the requirements. The proposal is part of the 2010 Pipeline Reauthorization Act which is expected to be presented to Congress sometime in the fourth quarter of this year.

2. Right now the purported cause of the spill is that a branch fell during a heavy windstorm, created an electric arc, which hit a metal fencepost that was driven to the ground just inches from the pipeline. When the electricity arced through that fencepost, it burned a hole in the pipeline. Do you agree with this preliminary assessment? If so, can you answer yet why the fencepost was within inches of the pipeline? Are there other pipelines similarly situated so close to metal fences or electrical substations?

Response:

CPL has removed the damaged segment of the pipeline that contains a hole approximately ½ inch in diameter and is cooperating with the operator of nearby electrical equipment, Rocky Mountain Power, to develop an analytical protocol to conduct analysis of the pipeline segment which will be submitted USDOT for approval. This work has not yet commenced. CPL expects that USDOT will provide oversight of the testing and that the results will be provided to the USDOT. Until the requisite analysis is completed, CPL cannot be certain what caused the pipeline failure. Notwithstanding this limitation, preliminary visual observations of the damaged pipeline appear consistent with damage caused by an electrical arc.

The pipeline was installed by Chevron in the early 1950s. The electrical equipment and security fence were installed by Rocky Mountain Power in the 1980s. CPL is still looking into the circumstances surrounding the placement of the fencepost in close proximity to the pipeline.

CPL has not identified any other metal fences or electrical substations within the Rangely pipeline easement.

3. The first time Chevron was aware of the leak was when the Salt Lake City Fire Department called them the next day. Can you explain the monitoring system for leaks in your pipelines and whether you believe the pipeline monitoring system was functioning properly? If so, why did it fail to detect the leak for over eight hours?

Response:

The leak detection system on the Hanna to Salt Lake City Pipeline (H-SLC) is comprised of crude oil positive displacement meters, pressure transmitters, SCADA system capabilities, and Excel log sheet calculations. The system’s components are integrated to provide the controller with hourly calculations of line balance and pressures, and was providing that data at the time of the leak. In this case, interpreting the leak detection data was challenging because the pipeline’s normal operating

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range is dynamic and has variations in flow rate, volume, and product and loss deviations. These variations arise due to the various grades of the crudes that are transported in batches of differing size through the pipeline and because the pipeline traverses considerable elevation changes.

CPL and the USDOT are currently investigating the circumstances surrounding the line failure. In fact, a USDOT representative visited the CPL Control Center on June 16, 2010, to review data and meet with CPL controllers. USDOT also recently issued a formal request for information to CPL. Until CPL and USDOT's investigations are complete, CPL cannot draw firm conclusions regarding the functioning of the pipeline monitoring system.

In the meantime, before reinitiating pipeline operations, CPL has reviewed alternatives to increase its leak detection capabilities on the Hanna to Salt Lake City segment of the pipeline and implemented the operational enhancements outlined in the response to Question 1.

4. When was the last inspection to the pipeline? Were there any violations cited during this inspection? How often are your pipelines inspected? Can you elaborate on what criteria and procedure are used to conduct these inspections?

Response:

The Rangely pipeline is regulated by the USDOT and must be inspected by CPL every five years. The Salt Lake Crude pipeline was last inspected by smart pig in 2008.

In addition, USDOT audited the pipeline in August of 2009 as part of its normal process and made no findings. USDOT has audited this pipeline system on average about every two years. A USDOT audit typically includes:

- A review of operations and maintenance procedures
 - A review operations and maintenance inspection records, including:
 - Corrosion control program (CP) – inspection of rectifiers, testing for CP coverage along the pipeline, atmospheric inspection
 - Patrolling the right-of-way & Line Markers
 - Inspecting Mainline Block Valves
 - Inspecting Overpressure safety devices
 - Training records of personnel
 - Firefighting equipment
 - Inspection of breakout tanks
 - Pipeline repair documents
 - A field inspection of facilities including valves, tanks and right-of-ways
5. It is my understanding that on Tuesday, June 15 the EPA established a Unified Command System with Chevron and that the EPA is reviewing Chevron's Incident Objectives. What are these Incident Objectives?

Response:

The Red Butte Unified Command has established the following incident objectives:

- Ensure the Safety of Citizens and Response Personnel

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- Minimize the Impact to the Environment
 - Contain and Recover Spilled Material
 - Manage and Coordinate Response Effort
 - Conduct Assessments and Shoreline Cleanup Efforts
 - Effectively Contain, Cleanup, Recover, and Dispose of Product
 - Identify Threatened Species and Prepare to Recover and Rehabilitate Injured Wildlife
 - Keep Stakeholders and Public Informed of Response Activities
 - Safely Resume Pipeline Operations
6. What standards do you use to determine when cleanup is complete and who will have the final approval of the cleanup process and certify that it is complete?

Response:

Cleanup is proceeding under the oversight of a Unified Command. CPL and its consultants are currently developing a proposed approach for cleanup and restoration activities for submission to the Unified Command for review and approval. The final cleanup plan will include completing the removal of recoverable oil based on applicable standards. The Unified Command (at least during the period in which it retains primary jurisdiction) and federal and state agencies (e.g., the USEPA and Utah DEQ) will continue to have oversight over cleanup, remediation and restoration activities.