

# Texaco Sunburst Works Refinery Facility

## Site Response Section

# Update



July 2008

### Current Status

On May 16, 2008, the Montana Department of Environmental Quality (DEQ) sent a Scope of Work (SOW) requiring Chevron Corporation (Chevron) to conduct a comprehensive investigation at the Texaco Sunburst Works Refinery (Facility). The Facility is a listed Comprehensive Environmental Cleanup and Responsibility Act (CECRA) facility. CECRA, the State's Superfund law, provides a legal mechanism for DEQ to require potentially liable persons to investigate and clean up hazardous or deleterious substances in Montana. DEQ will provide direction and oversight to Chevron for the additional investigation work. It is estimated that the additional investigation will begin in the fall of 2008 and last for several months.

### What does this mean?

Chevron will continue to investigate and delineate contaminated areas within the former refinery area and the town. This will include additional groundwater sampling, soil sampling, indoor air and soil vapor sampling. The SOW requires Chevron to investigate all remaining potential areas of suspected contamination. This will include the installation of soil borings and wells in the former tank farm area, around the perimeter of the Facility and in the town area. Shallow and deep groundwater will be investigated and characterized. Surface and subsurface soils on the Facility will be investigated for petroleum hydrocarbon, polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and metal impacts. Indoor air and soil gas samples will be collected at numerous residences in the town area. Chevron must investigate other refinery-related operations, including the former Snowcap Refinery, the railroad loading areas that were associated with the refineries, all former tank berms and other potential source areas. Chevron will also be conducting interim actions at the Facility. These include excavation and further delineation of lead-impacted soils at a residence. Free product recovery is continuing.

### Chronology

The Facility, on the southern and western edges of Sunburst, is an inactive 380-acre oil refinery that Texaco operated from 1924 until 1961. The refinery primarily produced leaded gasoline of various grades. In 1955, gasoline vapors ignited in the basement of a Sunburst residence, which led to the discovery of a pipeline leak on the northern boundary of the refinery property. An estimated 182,000 gallons of gasoline and contaminated groundwater were recovered by Texaco between 1955 and 1957. The majority of the former refinery property is currently used for grazing and farming. One residence is located within the former refinery property, and several residences border the former refinery's northern edge. PAH's, VOC's, metals (mostly lead), free product and petroleum hydrocarbons are present in the soil and groundwater at the Facility. Contamination that remains in the groundwater and subsurface soils is the focus of renewed remedial efforts overseen by DEQ.

In 1989, DEQ and Texaco entered into an Administrative Order on Consent to conduct a remedial investigation/feasibility study (RI/FS), as well as other investigations and remedial actions DEQ determines to be necessary at the Facility. DEQ issued this order pursuant to the authorities granted to the State of Montana under CECRA, as well as the federal Superfund law, the Comprehensive Environmental Response, Compensation and Liability Act. Between 1990 and the present, Texaco conducted various investigations, risk assessments, and some interim actions, as well as a Voluntary Cleanup Plan (VCP). In 2001, Chevron merged with Texaco, and Chevron has assumed responsibility for investigation and remedial activities at the former refinery.

DEQ also conducted a baseline health and ecological risk assessment for the Facility. DEQ issued its Proposed Plan for the Facility in June 2003, which included the proposed remedy of monitored natural attenuation (MNA). Natural attenuation is the reduction of contaminants in soil or ground water through natural physical, chemical or biological process. MNA is a technique

used to monitor or test the progress of the natural attenuation process after removal of the source of the contamination. In 2003, DEQ received additional information indicating that other clean-up options may be effective at the Facility. DEQ determined that a Supplemental Investigation (SI), Supplemental Pilot Testing (SPT), a Risk Assessment Addendum (RAA) and a Limited Subsurface Scoping Investigation (LSSI) were required in 2006 to further characterize and assess the Facility.

These investigations and additional work conducted by a third party consulting firm revealed that there are hydrocarbon and metals (primarily lead) contamination in unexpected and previously unknown areas of the Facility. DEQ is in the process of reviewing some of the data from the SI and LSSI, but has not yet received all of the data from Chevron's most recent investigations.

**Important findings from work conducted in 2006 and 2007 include:**

- 1) Free product (floating gasoline or other petroleum in groundwater) in town, in the former tank farm area and in the former refinery process area.
- 2) Additional spill or leak areas not related to the 1955 gasoline release.
- 3) Lead-impacted surface and subsurface soils at one residence and at additional locations in the former tank farm area.
- 4) Deeper and more widespread groundwater impacts.

**Third Party Remedial Actions**

In 2004, a group of private property owners in Sunburst (Plaintiffs) obtained a jury award against Texaco, Inc., including \$15 million for "restoration damages." This award was upheld by the Montana Supreme Court in 2007. The Plaintiffs have hired Water and Environmental Technologies (WET) of Butte, Montana to conduct restoration activities in the town area. With DEQ's permission, WET has conducted investigations at the Facility.

WET is using the data collected from these investigations to assess different methods for performing restoration work on the Plaintiffs' private property. WET has submitted a work plan to DEQ that addresses a portion of the town. DEQ is in the process of reviewing this document. The work performed by WET is separate from the remediation work that DEQ is requiring Chevron to conduct under CECRA.

**What is DEQ's role in all of these activities?**

Under CECRA, DEQ continues to require Chevron to perform appropriate remedial actions, approve or deny all of Chevron's work plans and reports, and oversee all of the work that Chevron conducts at the Facility. DEQ will also review WET work plans, provide comments and determine whether to grant permission for WET to conduct remedial actions. An environmental consulting firm, CDM of Helena, Montana, is providing technical support to DEQ.

All of this adds up to a very busy 2008 field season in Sunburst. DEQ and CDM will be in Sunburst at various times throughout the field season to oversee the activities. Based on the findings of these investigations and additional work conducted by WET, DEQ will re-evaluate its preferred clean-up option for the Facility.

If you have any questions or concerns, please feel free to contact DEQ's project officer, Steve Opp, at [sopp@mt.gov](mailto:sopp@mt.gov) or at 406-841-5069. You may also use the Montana Superfund Hotline (1-800-246-8198) and request to speak with Steve.

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