



State of Utah
GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Mailed
12-18-12
FB

FILE COPY

December 18, 2012

Bret Randall
c/o Durham, Jones & Pinegar
111 East Broadway, Suite 900
P.O. Box 4050
Salt Lake City, Utah 84110
brandall@djplaw.com
801.415.3000

Dear Mr. Randall,

Subject: Response to Comments; Red Butte Creek Oil Spill – NOVI10-1 Draft Decision Document/NOV Closeout.

Thank you for your input on the above referenced Draft Decision Document during the 30-day public comment period held from November 9, 2012 to December 10, 2012. All but the unnumbered introductory comment were the same as were submitted during the 30-day public comment period held from July 12, 2012 to August 13, 2012 for the "Human Health Risk Assessment-Red Butte Creek, Salt Lake City, Utah" and the "Working Draft Screening Level Ecological Risk Assessment-Lower Red Butte Creek Salt Lake City, Utah," ("Risk Assessments"). Therefore, the DWQ will directly respond to your unnumbered comment here. In responding to the remaining comments, the DWQ incorporates its previous responses to your comments to the Risk Assessments as supplemented by the Decision Document. In addition, the DWQ will offer a brief clarification to its previous response to your comment No. 1. The introductory comment and comment No. 1 raised in your December 10, 2012 letter are noted in italics below, and DWQ's responses are provided after each point in non-italics.

Comment: The impacted property owners have a number of questions and concerns about the draft human health and ecological risk assessments. In our view, these questions were not adequately addressed or answered in response to the comments that were submitted to you on or about August 10, 2012. In short, we believe that remediation goals are not appropriate and that residual petroleum contamination that is still located on the Impacted Property Owners' properties is not acceptable and should be fully remediated so as to restore these properties to their original condition. The continuing, long-term presence of residual contamination at such high levels has impacted and will continue to negatively impact the value of my clients' properties and their unrestricted use and enjoyment thereof. The following comments are not intended to be comprehensive and we reserve the right to make additional comments about, and criticisms of, the risk assessments and the underlying data upon which they rely.

Response: In determining whether to close a notice of violation and order, the DWQ considers whether the responsible party has complied with the order. In this instance, the DWQ believes that the responsible party, Chevron, has substantially complied with the order as set forth in the Decision Document. As discussed in the Risk Assessments, high levels of residual contamination do not remain in the water, sediments, soil, and banks of Red Butte Creek. To the extent Chevron

has not completely and fully complied with the order, Chevron remains responsible as discussed in the Decision Document. In addition, Chevron will enter a stipulated compliance order concerning the remaining requirements.

Comment No. 1: Judgment Based Sampling Methods Should Have Been Employed. The draft human health and ecological risk assessments depend on a data set that was generated using random sampling methodology instead of on judgment based sampling methods. The U.S. Environmental Protection Agency and the U.S. Coast Guard, in their sampling directives for oil releases, require that engineering judgment be used to find the maximum impact locations at a release site, in order to be most protective of human health and of the environment. See Emergency Response Quality Assurance Sampling Plan For Hurricane Katrina Response Screening Level Sampling For Sediment In Areas Where Flood Water Receded Southeast, Louisiana; U.S. Environmental Protection Agency Region 6, September 2005. In petroleum contaminated environments, random and systematic sampling necessarily generate a larger number of samples that show no detections compared to judgment-based sampling. When averaged with other samples, such "non-detect" samples have the effect of generating invalid risk assessment results.

Response No. 1:

- A) A random sampling methodology was not used. Judgment based sampling methods were used. The minimum number of sample locations was determined by a statistical evaluation. The sample locations were identified through a two-step process. First, sample locations were initially selected with the goal of providing even spatial coverage. Second, the proposed locations were modified after considering previous analytical results, visual observations during creek inspections, land use, and accessibility of sample location. This two-step process was implemented in order to identify maximum impact locations to the extent practicable. In addition, fine-grained soil and sediment were targeted at each sampled location per the Sampling Plan because fine grained soil and sediment are anticipated to have higher concentrations of contaminants than coarse grained soil such as gravel.

DWQ incorporates the remaining portion of its earlier response to this comment as if fully set forth herein.

We thank you for your interest and participation in the Red Butte Creek Oil Spill clean-up process. We share your desire for incidents like this to not occur again in the future. If you need clarification, or would like to discuss these points further, please contact Hilary Arens at 801-536-4332 or hilaryarens@utah.gov.

Sincerely,



Walter L. Baker, P.E.

Director

Utah Division of Water Quality

c.c. Craig Galli, Holland & Hart LLP
Sandra Allen, Attorney General's Office

HA/jw/ska/fb



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

MAILED 12-18-12
FE
FILE COPY

December 18, 2012

George Chapman
1186 South 1100 East
Salt Lake City, Utah 84105
gechapman2@gmail.com
801-867-7071

Dear Mr. Chapman,

Subject: Response to Comments; Red Butte Creek Oil Spill – NOVI10-1 Draft Decision Document/NOV Closeout.

Thank you for your email of December 6, 2012 that provides input on the proposed Draft Decision Document noted above during the 30-day public comment period held from November 9, 2012 to December 10, 2012. Each of the points you raised in your December 6, 2012 email is noted in italics below, and the Division's responses are provided after each point in non-italics.

Comment No.1: I find that the Draft Decision Document is deficient in that it does not require Chevron to pay for better and portable analytical equipment necessary for emergency testing.

Response No. 1: The issue of analytical equipment is not a factor that is considered in whether to close a contaminated site. However, please note that analytical equipment for air monitoring would be the one area where portable analytical equipment would be applicable. While portable air monitoring equipment was utilized by Salt Lake County Fire Department and Salt Lake County Health Department, the focus of this monitoring was more aimed at worker and citizen hazard determination in the initial stages of the spill response. In an attempt to address this area of concern, one of the projects funded by Chevron's \$3.5 million penalty payment under the November 10, 2011 Settlement Agreement, was a project awarded to Salt Lake Valley Health Department for \$30,000 for "Air Sampling Training and Equipment." Details on this project can be found at <http://www.deq.utah.gov/locations/redbutte/docs/2011/Dec/proposals/App8SLVHDAirSamplingTrainingEquip.PDF> or by contacting DWQ directly. Additionally, Chevron has paid for all of the water, sediment and macro-invertebrate sampling and associated analysis including time that DWQ has performed.

Comment No.2: In addition, Chevron, SLC, SLCO and Utah should work on training and walking/running the paths of the pipelines in SLCO so that in the next emergency, fire department personnel will be familiar with the area.

Response No. 2: The provision of personnel training is not a factor that is considered in whether to close a contaminated site. However, DWQ agrees that it is important that the Fire Departments are familiar with the pipelines in Salt Lake Valley and throughout Utah. The actual regulatory agency responsible for pipeline safety and operation is the federal Pipeline and Hazardous Materials Safety Administration

Mr. Chapman

Page 2

(PHMSA) (“to protect people and the environment from the risks inherent in transportation of hazardous materials - by pipeline and other modes of transportation” (<http://www.phmsa.dot.gov>)). There are emergency response numbers on signs all along the pipelines in Salt Lake Valley, and DEQ and Salt Lake Valley Health Departments have emergency spill numbers as well. Those numbers are: DEQ-801-536-4123 (24/Hr Spill Line) and Salt Lake Valley Health Department- 385-468-8888.

Comment No.3: Planning should include earthquake training and contingencies such as berms ready to be pushed into streams to divert spills to catchment basins.

Response No. 3: The issue of earthquake preparedness is not a factor that is considered in whether to close a contaminated site. However, DEQ was very involved with the April 17, 2012 “Great ShakeOut” exercise (http://www.shakeout.org/utah/participant_list.php?start=utah&category=state) held to begin to prepare for future seismic events. In addition, as previously noted, the federal PHMSA organization would be the primary regulatory agency charged with providing for safety and seismic event contingencies for pipelines.

Comment No.4: Residents along the potential path of a leak should be given emergency phone numbers of Chevron and other potential pipeline operators along with rapid response phone numbers.

Response No. 4: The provision of emergency response is not a factor that is considered in whether to close a contaminated site. However, as stated in Response No. 2, there are emergency response numbers on signs all along the pipelines in Salt Lake Valley, and DEQ and Salt Lake Valley Health Departments have emergency spill numbers as well. Those numbers are: DEQ-801-536-4123 (24/Hr Spill Line) and Salt Lake Valley Health Department- 385-468-8888. Moreover, in the event of any emergency, calling 911 will initiate an immediate response.

Comment No.5: Chevron and other refineries in the area should pay local fire dept. personnel to be trained to recognize warning signs of leaks or weak or trouble areas and train along the pipelines paths regularly. The fire dept. personnel should not feel that they should wait for the hazardous waste team.

Response No. 5: While some of the issues you bring up here are important for the health and well-being of Salt Lake Valley residents, this is beyond DWQ authority and outside the scope of the “NOV I10-1 Decision Document/NOV Closeout” document.

Thank you for your time in explaining the report and I appreciate your consideration.

We thank you for your interest and participation in the Red Butte Creek Oil Spill clean-up process. We share your desire for incidents like this to not occur again in the future. If you need clarification, or would like to discuss these points further, please contact Hilary Arens at 801-536-4332 or hilaryarens@utah.gov.

Sincerely,



Walter L. Baker, P.E.

Director

Utah Division of Water Quality

c.c. Craig Galli, Holland & Hart LLP
Sandra Allen, Attorney General's Office

HA/jw/ska/fb



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Mailed
12-18-12
FB
FILE COPY

December 18, 2012

Robert Nelson
1348 Laird Avenue
Salt Lake City, UT 84105
bob.nelson@utah.edu

Dear Mr. Nelson,

Subject: Response to Comments; Red Butte Creek Oil Spill -- NOVI10-1 Draft Decision Document/NOV Closeout.

Thank you for your input on the Draft Decision Document noted above during the 30-day public comment period held from November 9, 2012 to December 10, 2012. Each of the points you raised in your November 20, 2012 email is noted in italics below, and the Division's responses are provided after each point in non-italics.

I have two questions with regard to the proposed draft:

***Comment No. 1:** The numbers in the second paragraph of the document confuse me. The estimate of the amount of crude oil spilled by Chevron on 6-10-10 was 800 barrels, or 36,600 gallons, which equals 45.75 gallons per barrel. However, the estimate of the amount removed was 778 barrels, or 32,676 gallons, which equals 42.0 gallons per barrel. The basic arithmetic inconsistency with regard to the amount a "barrel" holds--45.75 gallons versus 42.0 gallons--raises questions about the accuracy of the rest of the report. Please be so kind as to clarify or correct this matter.*

Response No. 1:

The standard oil barrel of 42 US gallons is used in the United States as a measure of crude oil and other petroleum products. The official estimation was 800 barrels, or 33,600, although the document says 36,600. As the estimation of the amount removed was 778 barrels (32,676 gallons), which follows this 42 US gallons/barrel, we believe that the reported amount of 36,600 gallons was a typo in this document and should have read 33,600 gallons. Thank you for pointing this out. This number will be corrected in the final document.

***Comment No. 2:** I see no mention of the impact of the crude oil spill on the property values of home near the Red Butte Creek. Since neighbors of ours are parties in a law suit claiming a significant reduction in their property values directly attributable to the crude oil spill, I am surprised to see no reference to that matter. Again, I will appreciate your clarification.*

Response No. 2:

In determining whether to close a DWQ notice of violation and order, the DWQ considers whether the responsible party has complied with the DWQ order. In this instance, the DWQ believes that the responsible party, Chevron, has substantially complied with the DWQ order as set forth in the Decision Document. The Decision Document is not intended to address damages to property values or other associated third party civil actions that are under the purview of the district court, a forum that is distinct and separate from DWQ. Therefore, the focus of the Decision Document is on environmental impacts and risks of the June 2010 oil spill, issues that are within the scope of DWQ's authority.

Thanks very much for your careful work on the aftermath of this unfortunate event.

We thank you for your interest and participation in the Red Butte Creek Oil Spill clean-up process. We share your desire for incidents like this to not occur again in the future. If you need clarification, or would like to discuss these points further, please contact Hilary Arens at 801-536-4332 or hilaryarens@utah.gov.

Sincerely,



Walter L. Baker, P.E.

Director

Utah Division of Water Quality

c.c. Craig Galli, Holland & Hart LLP
Sandra Allen, Attorney General's Office

HA/jw/ska/fb



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Marked
12-18-12
FILE COPY

December 18, 2012

Daniel Potts
c/o Great Salt Lake Keeper
P.O. Box 522220
Salt Lake City, Utah
801-539-3517
saltoftheearth@greatsaltlakekeeper.org

Dear Mr. Potts,

Subject: Response to Comments; Red Butte Creek Oil Spill – NOVI10-1 Draft Decision Document/NOV Closeout.

Thank you for your input on the Draft Decision Document noted above during the 30-day public comment period held from November 9, 2012 to December 10, 2012. Each of the points you raised in your December 10, 2012 letter is noted in italics below, and the Division's responses are provided after each point in non-italics.

Comment No. 1: It has not been adequately demonstrated to the public that the cleanup by Chevron has been completed. The public suspects that additional oil residues still exist in the soil adjacent to certain reaches of Red Butte Creek, and conclusive testing has yet to be done on those soils.

Response No. 1: All samples of water, sediment, bank soil and macro-invertebrates have shown that 1) water chemistry results are non-detects, and 2) all sediment (instream) and bank (adjacent to stream) soil results have fallen below the "EAL=Expedited Action Level." As DEQ either sampled or supervised the targeted collection of samples from depositional areas most likely to contain oil, we are confident that the results reflect the most impacted soils of the areas sampled. Results can be found at <http://www.deq.utah.gov/locations/redbutte/samplingresults.htm>. Additionally, all reported "hot spots" or areas of suspected remaining oil have been tested and subsequently removed from the creek if results warrant their extraction and this routine will continue into the future. The "Draft Decision Document/NOV Closeout" does state that active clean-up actions will occur "[if] additional information discloses a significant problem associated with the CPL release..."

Comment No. 2: Sampling of macro invertebrates has been inadequate in some suspect reaches of Red Butte Creek, especially for those below Mount Olivet Diversion.

Response No. 2: The following locations were chosen in Red Butte Creek for macro-invertebrate sampling: 1) Above Spill (RB Garden), 2) Below Spill (Chipeta Way), and 3) Below Spill (1500 East). The 1500 East site is directly south of Mount Olivet Cemetery and includes the majority of the flow from Red Butte Creek, and DWQ therefore feels that this is a representative site to show the recovery of the

FILE COPY

macro invertebrate population.

Comment No. 3: We do not believe that flows below the Mount Olivet Diversion in the dewatered reaches of Sunnyside and Miller Parks, and Bonneville Glen have been adequately flushed of remaining oil spill residues from soils as compared to flows in other reaches both up and downstream.

Response No. 3: Mount Olivet was sampled under the supervision of DEQ, SLVHD, and the cemetery groundskeeper, and targeted soil samples were taken from four locations around the pond. No results were above the “EAL=Expedited Action Level.” Additionally, extreme high flows occurred in the spring of 2011, allowing for higher flows than any of the planned flushing events.

Additionally, as stated previously in Response No. 1, all reported “hot spots” or areas of suspected remaining oil have been tested and subsequently removed from the creek if results warrant their extraction and this routine will continue into the future. The “Draft Decision Document/NOV Closeout” does state that active clean-up actions will occur “[if] additional information discloses a significant problem associated with the CPL release...”

Comment No. 4: We feel that funding through the settlement Agreement has been misappropriated because too much of the funding went to projects and other efforts that did little to mitigate for actual damages caused by Chevron’s oil spill and the additional damages caused by their cleanup efforts.

Response No. 4: All but one organization that applied for this pool of money was awarded funding, including Great Salt Lake Keeper and Salt Lake County Fish and Game Association (SLCF&GA). DWQ was disappointed to learn that these two organizations declined their funding. This concern is not particularly relevant to the issue of the Decision Document items and closure of the NOV.

Finally, the document you provided entitled “Managing Off-Flavor Problems in Pond-Raised Catfish” (Tucker and van der Ploeg, *year unknown*) does not seem a apply to the Decision Document associated with the Red Butte Creek Oil Spill.

We thank you for your interest and participation in the Red Butte Creek Oil Spill clean-up process. We share your desire for incidents like this to not occur again in the future. If you need clarification, or would like to discuss these points further, please contact Hilary Arens at 801-536-4332 or hilaryarens@utah.gov.

Sincerely,



Walter L. Baker, P.E.
Director
Utah Division of Water Quality

c.c. Craig Galli, Holland & Hart LLP
Sandra Allen, Attorney General’s Office

HA/jw/ska/fb