

# ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6  
10625 Fallstone Road  
Houston, TX 77099

Alion Science and Technology

## MEMORANDUM

DATE: October 10, 2017

TO: Raymond Flores, ESAT PO, Region 6 EPA  
Marvelyn Humphrey, Alt. ESAT PO, Region 6 EPA

CC: Myra Perez, ESAT TO COR, Region 6 EPA

FROM: Ying-Ping Hsieh, Data Reviewer, ESAT *YH*

THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT *DGJ*

SUBJECT: San Jacinto Waste Pits Data Validation

Contract No.: EP-W-13-026  
TO No.: 002  
Task/Sub-Task: 2-13  
ESAT Doc. No.: 1802-213-0001  
TDF No.: 6-18-015A

ESAT was tasked to review a Dioxin/Furan validation report for San Jacinto Waste Pits, provide expert opinion regarding data validation (DV) assessment, and clarification on the usage in the report of the DNR (do not report) qualifier. The ESAT reviewer completed review of the data validation report in conjunction with the two packages of sample results (SDGs E1700973 & E1700974). The following comments should be noted:

1. The data validation report includes a "Qualified Data Summary Table" that provides a summary of only results with DV qualifiers. Laboratory results not requiring qualification are not included in the "Qualified Data Summary Table."
2. An analytical result is qualified in the "Qualified Data Summary Table" as "DNR" when there is a more appropriate result reported by the laboratory. Consequently, the flagged result should not be reported or used. To illustrate, please consider the following:
  - a. On the "Qualified Data Summary Table," the 2,3,7,8-TCDD result for Sample SJWP-091517-030EPA (E1700973-011), 21,200 ng/kg (undiluted, "E" for over the calibration range) was qualified as "DNR" because there was a more appropriate

result, 56,800 ng/Kg (200X dilution) reported on the laboratory analytical report. The 2,3,7,8-TCDD result, 56,800 ng/kg, should be used for reporting, since it did not exceed the calibration range.

It is the same case for the "DNR"-flagged results for 2,3,7,8-TCDF (82,400 ng/Kg, "E") and OCDD (9,080 ng/kg, "E"). The 200X dilution results, 127,000 ng/kg and 29,600 ng/Kg for 2,3,7,8-TCDF and OCDD, respectively, reported on the laboratory analytical report are the results that should be reported. Additionally, "DNR" results for remaining analytes should not be reported or used, and instead the results found on the laboratory analytical report should be reported.

- b. The same explanation applies also to the "DNR" results associated with sample SJWP-091517-030 (E1700974-011).
- 3. The "Qualified Data Summary Table" includes some EMPC (Estimated Maximum Possible Concentration) results qualified as undetected ("U") that the laboratory had "K"-flagged originally. These data would be better qualified as estimated ("J") instead of undetected ("U"), since it is likely that contamination interference resulted in the outlying ion ratio that resulted in the original "K" flag. ESAT reviewer compared the differences that result from the "U" qualifications and determined the effect was minimal for total TEQ (Toxic Equivalent Quantity) calculations, with one exception. The 2,3,7,8-TCDD result for sample SJWP-091517-030 (E1700974-011), 33,400 ng/Kg, was qualified as undetected ("U") on the "Qualified Data Summary Table;" however, this result should be qualified as estimated and included in the TEQ for this sample.