

# JOINT SETTLEMENT FRAMEWORK

## FINAL Agreement in Principle between The U.S. Department of Energy and the State of California Regarding Cleanup of Area IV of the Santa Susana Field Laboratory

**SUMMARY:** The end state of the site (the whole of Area IV and the Northern Buffer Zone) after cleanup will be background (i.e., at the completion of the cleanup, no contaminants will remain in the soil above local background levels), subject to any special considerations specified below.

- Clean up radioactive contaminants to local background concentrations. Possible exceptions (where unavoidable by other means):
  - The framework acknowledges that, where appropriate, DOE will engage in an Endangered Species Act (ESA) Section 7(a)(2) consultation with the U.S. Fish and Wildlife Service (FWS) over any species or critical habitat that may be affected by a federal action proposed to be undertaken herein on a portion of the site. Impacts to species or habitat protected under the Endangered Species Act may be considered as possible exceptions from the cleanup standard specified herein only to extent that the federal Fish and Wildlife Service, in response to a request by DOE for consultation, issues a Biological Opinion with a determination that implementation of the cleanup action would violate Section 7(a)(2) or Section 9 of the ESA, and no reasonable and prudent measures or reasonable and prudent alternatives exist that would allow for the use of the specified cleanup standard in that portion of the site.
  - The acceptance and exercise of any of the following exceptions is subject to DTSC's oversight and approval, and the resulting cleanup is to be as close to local background as practicable:
    - Detection limits for specific contaminants exceed the local background concentration, in which case the cleanup goal shall be the detection limits for those specific contaminants.
    - Native American artifacts that are formally recognized as Cultural Resources.
    - Other unforeseen circumstances but only to the extent that the cleanup cannot be achieved through technologically feasible measures. Under no circumstances shall exceptions for unforeseen circumstances be proposed in excess of five percent of the total soil cleanup volume.

- US EPA, in the course of conducting its radioactive contaminant background study, will determine local background levels and detection limits. Upon completion of the EPA led radiologic local background study, a “look-up” table of the radiologic cleanup levels will be prepared, which will include both local background concentrations as well as minimum detection limits for specific contaminants whose minimum detection limits exceed local background concentrations.
- Clean up chemical contaminants to local background concentrations  
Possible exceptions (where unavoidable by other means):
  - The framework acknowledges that, where appropriate, DOE will engage in an Endangered Species Act (ESA) Section 7(a)(2) consultation with the U.S. Fish and Wildlife Service (FWS) over any species or critical habitat that may be affected by a federal action proposed to be undertaken herein on a portion of the site. Impacts to species or habitat protected under the Endangered Species Act may be considered as possible exceptions from the cleanup standard specified herein only to extent that the federal Fish and Wildlife Service, in response to a request by DOE for consultation, issues a Biological Opinion with a determination that implementation of the cleanup action would violate Section 7(a)(2) or Section 9 of the ESA, and no reasonable and prudent measures or reasonable and prudent alternatives exist that would allow for the use of the specified cleanup standard in that portion of the site.
  - The acceptance and exercise of any of the following exceptions is subject to DTSC’s oversight and approval, and the resulting cleanup is to be as close to local background as practicable:
    - Detection limits for specific contaminants exceed the local background concentration, in which case the cleanup goal shall be the detection limits for those specific contaminants.
    - Native American artifacts that are formally recognized as Cultural Resources
    - Other unforeseen circumstances but only to the extent that the cleanup cannot be achieved through technologically feasible measures. Under no circumstances shall exceptions for unforeseen circumstances be proposed in excess of five percent of the total soil cleanup volume.
- DTSC, in the course of overseeing and approving its chemical contaminant local background study, will determine local background levels and chemical detection limits (using methods that are consistent with EPA guidance on determining local background concentration values). Upon completion of the DTSC led chemical background study, a “look-up” table of the chemical cleanup levels will be prepared, which will include both local background concentrations as well as minimum

detection limits for specific contaminants whose minimum detection limits exceed local background concentrations.

- Residual concentrations “not to exceed” local background concentrations i.e., if during site survey efforts or during confirmatory sampling the level of any constituent detected in a soil sample is above local background levels, step-outs will be taken to delineate the contamination and removed; soil above local background will not be averaged with other soil. This process should not be inconsistent with any guidance that EPA may issue pertaining to the practice of implementing a not to exceed local background cleanup approach.
- Cleanup to local background means removal of soils contaminated above local background levels
  - No “leave in place” alternatives will be considered
  - No on-site burial or landfilling of contaminated soil will be considered
- Backfill/replacement soils must not exceed local background levels
  - Onsite soils that do not exceed local background may be used as backfill/replacement soils
  - Offsite soils that have been verified to not exceed local background levels may be used as backfill/replacement soils
  - Backfill/replacement soils that are acceptable for use shall be verified as follows:
    - U.S. EPA for radioactive contaminants
    - DTSC for chemical contaminants
- Disposal of contaminated soils:
  - Soils contaminated with radioactive contaminants above local background to licensed low-level radioactive waste (LLRW) disposal site or an authorized LLRW disposal facility at a DOE site
  - Soils contaminated with chemical contaminants above local background:
    - Hazardous wastes to licensed Class 1 hazardous waste disposal facilities only
    - Non-hazardous waste to licensed Class 2 or subtitle D compliant Class 3 disposal facilities only
  - Mixed wastes (with radioactive and hazardous constituents) to go to a site licensed for mixed wastes or an authorized mixed waste disposal facility at a DOE site
  - In addition to meeting the above disposal requirements, all soils must also meet the waste acceptance criteria for the receiving facility.
- EPA to carry out the following:

- U.S.EPA to provide split samples to DTSC for chemical contaminants as it samples for radioactive constituents during its Area IV and Northern Buffer Zone Survey work
  - U.S.EPA to conduct post cleanup confirmatory radiation assessment in areas where cleanup was performed to verify completion of cleanup
  - U.S.EPA to verify that backfill/replacement soils do not exceed local background for radioactive constituents.
- Radioactive contaminants investigation/data gaps
    - U.S.EPA is responsible for the investigation of radioactive contamination. Investigation reports related to radioactive contaminants previously prepared for and submitted by DOE will not require revision – U.S.EPA’s survey efforts will be sufficient for determining the nature and extent of radioactive contamination and areas requiring cleanup of radioactive materials within Area IV and Northern Buffer Zone.
    - U.S.EPA, in the course of conducting its radioactive contaminant survey, will determine where onsite levels exceed local background within Area IV and Northern Buffer Zone.
- Chemical investigation/data gaps
    - Where EPA is already taking samples for radiologic contaminants as part of its Area IV and Northern Buffer Zone survey work, DTSC will arrange for analysis of split samples (paid for by DOE)
    - In addition to the split samples from U.S.EPA, in areas where DTSC determines that additional likely chemical contamination is expected, DOE, upon DTSC request, will provide additional information that is existing or readily available for purposes of assisting DTSC in focusing additional investigation efforts, and will conduct additional investigation, under DTSC direction and oversight, consistent with local background/detection limit data quality objectives and measurement sensitivity. In carrying out additional chemical investigation, DOE will not be required to revise investigation reports related to chemical contaminants previously prepared for and submitted by DOE.
    - DTSC, in the course of overseeing and approving the chemical contaminant investigation work, will determine where onsite levels exceed local background.
- Development of risk assessments will not be required.
  - As identified by EPA in its rad survey and by DTSC as part of the investigation of chemical contaminants, DOE will remediate the areal extent of any contiguous radiologic or chemical contamination of soil that emanates from within Area IV even to the extent that it migrates beyond

the boundaries of Area IV or the Northern Buffer Zone, within or without the SSFL boundaries.

- Following completion of the characterization studies by EPA and DTSC, DOE will develop a remedial action implementation work plan that describes the Area IV and Northern Buffer Zone cleanup activities. The remedial action implementation work plan will be subject to DTSC review and approval.
- Scheduled completion of soils cleanup remains as 2017
- DOE's commitment to cleanup to local background applies to soils and not to groundwater at the site. Investigation and remediation of groundwater will be separately addressed, and provisions related to investigation and remediation of groundwater will be incorporated into a final agreement.
- Characterization and cleanup (for both chemicals and radiologic contaminants) of both soils and groundwater are subject to DTSC approval.
- Final agreement between DOE and California, and the cleanup obligations within that agreement, will be legally binding and enforceable.
- DTSC work to be fully funded by DOE.
- DTSC will conduct a public participation process to receive public input regarding the agreement prior to its finalization. This process will include a formal comment period and may include public meetings or discussions.
- This framework concerns SSFL Area IV and Northern Buffer Zone only and is between the Department of Energy and the State of California represented by the Department of Toxic Substances Control and the California Environmental Protection Agency. The framework is based upon the unique circumstances of Area IV and Northern Buffer Zone, including the nature of the releases of hazardous and radioactive contamination that have occurred at Area IV and Northern Buffer Zone. This framework does not establish precedent and shall not be used as precedent for any other agreement for any other area within the SSFL.