

## Nowell, Keith, Env. Health

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**From:** Nowell, Keith, Env. Health  
**Sent:** Monday, November 30, 2015 12:58 PM  
**To:** 'Diane Heinze'; Prowell, Cheryl@Waterboards; Fry, Nicole@Waterboards  
**Cc:** 'Lydia Huang'; Roe, Dilan, Env. Health; Douglas Herman  
**Subject:** RE: Request for Work Plan Extension, Site Cleanup Program case RO414 - MOIA, UNITED AIRLINES MF35/36, 1100 Airport Drive, Oakland

Diane,

Your request for an extension for the work plan submittal for the subject Site Cleanup program (SCP) case to January 29, 2016 has been approved.

Regards,  
Keith Nowell

Keith Nowell PG, CHG  
Hazardous Materials Specialist  
Alameda County Environmental Health  
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<http://www.acgov.org/aceh/lop/ust.htm>

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**From:** Diane Heinze [mailto:dheinze@portoakland.com]  
**Sent:** Wednesday, November 25, 2015 10:52 AM  
**To:** Nowell, Keith, Env. Health <Keith.Nowell@acgov.org>; Prowell, Cheryl@Waterboards <Cheryl.Prowell@waterboards.ca.gov>; Fry, Nicole@Waterboards <Nicole.Fry@Waterboards.ca.gov>  
**Cc:** 'Lydia Huang' <lydia@baseline-env.com>; Roe, Dilan, Env. Health <Dilan.Roe@acgov.org>; Douglas Herman <dherman@portoakland.com>  
**Subject:** Request for Work Plan Extension, Site Cleanup Program case RO414 - MOIA, UNITED AIRLINES MF35/36, 1100 Airport Drive, Oakland

Hi all and Happy Thanksgiving,

Thanks for meeting with Port staff yesterday to discuss this site. The following documents our conversation.

Port staff request that ACEH allow an extension for the work plan due November 30, 2015 to (Friday) January 29, 2016. Based on our meeting/conference call yesterday with RWQCB staff, the work plan will address:

1. Groundwater monitoring using existing wells in the wash rack area. Groundwater samples will be collected one time, and analyzed for CAM 17 metals. Port staff understands that Keith recommends that groundwater samples be filtered then acidified at the lab (and no preservation in the field). Groundwater flow direction will also be determined, and Figure 7 from Baseline's May 5, 2015 report will be updated showing nickel concentrations over time.

2. Concentrations of nickel and other metals in soil at the wash rack area will be reviewed to assess the feasibility of potential “hot spot” removal beyond background concentrations. At the meeting, we discussed a potential nickel background concentrations of 100 mg/kg.

3. Port staff may also recommend destruction of monitoring wells outside the wash rack area.

Diane

Environmental Assessment Supervisor

Port of Oakland

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**From:** Nowell, Keith, Env. Health [<mailto:Keith.Nowell@acgov.org>]

**Sent:** Friday, October 23, 2015 3:04 PM

**To:** Douglas Herman

**Cc:** Diane Heinze; 'Lydia Huang'; Roe, Dilan, Env. Health

**Subject:** Work Plan Request, Site Cleanup Program case RO414 - MOIA, UNITED AIRLINES MF35/36, 1100 Airport Drive, Oakland

Dear Mr. Herman,

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Technical Memorandum* (TM) dated May 5, 2015, which was prepared by Baseline Environmental Consulting (Baseline) for the Port of Oakland (Port) for the subject site. The TM was prepared in response to ACEH's request, dated March 5, 2015, for a data review to evaluate plume stability in the direction of the storm water channels to the northeast of the site.

The TM presented a review of existing analytical data to evaluate potential sources of nickel at the site and a habitat evaluation of the two drainage ditches located along the northwestern (Drainage Ditch #1) and northern (Drainage Ditch #2) site boundaries.

Elevated metals concentrations have been documented at the subject site in both soil and groundwater; however, there appears to be sufficient data to perform statistical analysis on only one metal- nickel. Two possible sources of nickel in the groundwater at the site are releases from former airplane maintenance operations and/or leaching from the soils/materials used to fill the area before the current facilities were constructed. The data review attempted to evaluate these two potential sources. As nickel concentrations in groundwater at the site appear generally higher than those found in nearby areas of the airport, the evaluation included a comparison of the nickel concentration data of the adjacent FedEx site to those of the subject site.

The data evaluation determined nickel concentrations in groundwater in samples collected at the site does appear to be higher than those collected from the FedEx site. However, historical records review indicates that the timing and source(s) of fill placed on the subject site are different from the fill placed on the adjacent FedEx site, hence invalidates the data comparison between the two sites.

The evaluation found nickel concentrations in the groundwater at the site varied spatially and temporally in individual wells, and that past operations at the subject site could have contributed nickel to the groundwater. The TM concluded that, with the available data and information, it is not possible rule out either of the two possible sources- activities associated with former airplane maintenance operations and leaching from the fill soils/materials- as contributing to the nickel concentrations in the groundwater at the site. It is also not possible to estimate the relative contribution from the two possible sources.

The habitat evaluation reported the lower portions of Drainage Ditch #1 is characteristic of a transitional zone between freshwater and brackish water. Indications of salinity included salt crust forming on dead vegetation, and loose soils. The vegetation observed in Drainage Ditch #2 is reported to be dominated by species that are tolerant of brackish environments. The evaluation concluded that the vegetation of Drainage Ditches 1 and 2 indicates variable concentrations of soil salinity and that Drainage Ditch 2 appears to be more brackish than Drainage Ditch 1.

## Technical Comments

1. Based on a review of the TM nickel determination, ACEH has concluded the potential off-site migration of metals to the drainage ditches has not been satisfactorily resolved.
2. Based on the habitat evaluation, the appropriate environmental screening levels (ESLs) for use in the data evaluation is ESL Table F-2c, Surface Water Screening Levels – Estuary Habitats.

Therefore at this junction, ACEH requests submittal of a work plan presenting a strategy to resolve the issue of off-site migration of metals to ecological receptors. Please be prepared to discuss the strategy at the forthcoming meeting between ACEH and the Port, tentatively scheduled for November 3, 2015. Submit the work plan by the date specified below. Please include a discussion of other site conditions that may support your recommendations.

## **Technical Report Request**

Please upload technical reports to the ACEH ftp site (Attention: Keith Nowell), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **November 30, 2015** –Work Plan (File to be named: WP\_R\_yyyy-mm-dd)

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Thank you for your cooperation. ACEH looks forward to working with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at [keith.nowell@acgov.org](mailto:keith.nowell@acgov.org).

Regards,  
Keith Nowell

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