SHEA-112273

Boeing Santa Susana Field Laboratory Status Report Interim Source Removal Action (ISRA) Outfalls 008 and 009 NPDES CA 0001309, CI-6027 November 2010

On Monday, July 18, 2010, the final pre-work site walk of Outfall 009 occurred. The purpose of the site walk was to review the Health and Safety Plan, to review activities, and to begin staging for the work. Prior to the field work, temporary sediment control and soil stabilization best management practices (BMPs) were installed downstream of the locations where the work will be performed. On Tuesday, July 19, 2010, work to remove contaminated soil in the Outfall 009 watershed commenced.

In the watershed of Outfall 009, Boeing is targeted eight (8) areas for removal of soil. The first area targeted was CTL1. The chemicals of concern in the area were metals and dioxins. The initial extent of excavation was expanded in CTL1-1A because the concentrations of metals detected exceeded the Soil Remediation Goals (SRGs). Subsequently, the excavation was continued until the concentration detected in soil was below the SRG or it was continued until bedrock was encountered in the areas surrounding the samples with the elevated metals concentrations. This protocol, the comparison of the detected concentration of the ISRA targeted contaminant in the soil after excavation to the SRGs, was used to evaluate the effectiveness of the excavation operations.

Soils from CTL-1, B1-1, and B1-2 were removed via mechanical excavator, super vac, and hand excavation. Regional Board and Department of Toxic Substances Control (DTSC) staff reviewed the confirmation samples collected at these locations and on conference calls held on October 11 and October 20, agreed that the planned excavations in these areas were complete and that they were ready for re-contouring and stabilization. Boeing has shipped approximately 6,834 tons of soil to either McKittrick or to Waste Management Lancaster from the targeted areas in the Outfall 009 watershed.

On October 5, excavation activities within the Outfall 009 watershed on the National Aeronautics and Space Administration (NASA) property began. Three previously identified areas were elevated concentrations of metals and dioxins had been detected were targeted in the Sewage Treatment Plant 1 (STP-1) area. The areas targeted for excavation were very close to clusters of oak trees. Every effort was made to work around and preserve the oak trees. In some cases hand tools were utilized to perform the excavation activities with super vac operations occurring directly adjacent the root systems. Approximately 1,160 cubic yards (cy) of soil were removed from the STP-1 area. Confirmation samples were collected from these areas on October 18, 2010. These samples indicated additional excavation was required. That work has been recently completed and confirmation sampling is scheduled for November 8, and November 12, 2010. Approximately 318 tons of soils from the STP-1 area were shipped in October.

The 2010 – 2011 ISRA activities have been augmented with an aggressive public participation effort by Boeing and NASA. Boeing has been providing opportunities for the interested public to come up and observe the excavation activities by appointment. Community Bus Tours have been held monthly with representatives from Boeing, NASA and the Department of Energy (DOE) participating. NASA provided a public announcement prior to the initiation of excavation activities on their property and invited the public to schedule a time to visit the site.

During the month of October, the area has experienced a number of small rain showers. This signals the beginning of the rainy season. Since the rainy season is upon us, Boeing in concert with Regional Board and DTSC staff has decided to suspend any additional excavation activities until after the rainy season. There are two areas that were included in the work plan for the 2010-2011 ISRA activities that will be addressed in the spring to 2011. These two areas are the Sewage Treatment Plant #1 area (STP-1B, STP-1C, and STP-1E (located on NASA owned property)) and for Instrument and Equipment Laboratory -2 (IEL -2) (located on Boeing owned property).

Best management practices (BMPs) have been implemented throughout the site. Since the watersheds of Outfalls 008 and 009 have disturbed soils additional structural BMPs are present within the watersheds. During the small rain events that occurred in October, Regional Board staff observed that additional BMPs were deployed prior to periods where rainfall was predicted. Open excavations were covered and any planned excavations were halted in an effort to ensure that loose soil and sediment was not mobilized by rainfall runoff. Boeing is also in the process of implementing a system which will collect the runoff generated a most of the perimeter outfalls (Outfalls 003, 004, 005, 006, and 007) and the interior outfalls (Outfall 010, 012, 013, and 014) and transport that runoff over to treatment system located adjacent Outfalls 011 and 018. The ponds located adjacent these two outfalls will be utilized to store the collected rainfall runoff for treatment. After treatment the rainfall runoff will be discharged via Outfalls 011 or 018. The components of the treatment systems are arriving onsite and it will be fully operational in January. The timing coincides with the accumulation of enough water to operate the treatment system. The recent rainfall events have not generated sufficient rainfall to generate discharges at any of the outfalls except Outfall 009, which discharged on October 7, 2010 and on October 20, 2010. National Pollutant Discharge Elimination System (NDES) samples were collected as per the permit requirements.