Remedial Investigation Report #2
with Proposed Remedial Investigation/Action
Former SGA Facility
8 Lion Gate Drive
Bloomfield Borough, Essex County, New Jersey
NJDEP Case No.: 930607SP01
EWMA Project No. 200261

a grid sampling approach. Six 25' x 50' grids were established within this area. Samples were collected at each grid node (BG-1 through BG-12). Four samples were also collected on the perimeter of the grid (BG-13 through BG-16). All of the samples were analyzed for PPMs and hexavalent chromium analysis was performed on the perimeter samples.

Hexavalent chromium was not detected. Six of the samples (BG-4, BG-5, BG-7, BG-8, BG-9 and BG-13) exhibited at least one PPM in excess of the RDCSCC. Copper was detected in one of the grid samples at a concentration of 3,000 ppm. Lead was detected in one of the grid samples at a concentration of 1,690 ppm. Lead was detected in one of the perimeter samples at a concentration of 414 ppm. Mercury was detected in five of the grid samples at concentrations ranging from 24.4 ppm to 70.7 ppm. Mercury was detected in one of the perimeter samples at a concentration of 19.9 ppm. Zinc was detected in two of the grid samples at concentrations ranging from 2,090 ppm to 6,710 ppm.

To further evaluate the horizontal and vertical extent of the elevated metal contamination detected at location BG-13, EWMA installed test pits/soil borings in September of 1998. EWMA reported broken glass was observed in all test pit/boring locations. Four horizontal delineation samples (BG-13N, BG-13E, BG-13S and BG-13W) were obtained 10 feet away from the initial sample location at a depth of 0.5-1' bsg. One vertical delineation sample (BG-13) was obtained from a depth of 3-4' bsg. The vertical delineation test pit was advanced by a backhoe to a depth of 6" above the desired sample depth.

EWMA analyzed all of the samples for PPM. Mercury was detected in the vertical delineation sample (BG-13) at a concentration of 26.4 ppm. Arsenic was detected in one of the horizontal delineation samples, BG-13W, at a concentration of 127 ppm. Lead was detected in one of the horizontal delineation samples, BG-13N, at a concentration of 1,400 ppm. Mercury was detected in one of the horizontal delineation samples, BG-13E, at a concentration of 66 ppm. Zinc was detected in once of the horizontal delineation samples, BG-13N, at a concentration of 1,580 ppm

EWMA also collected three samples along the northeast boundary of this area on September 22, 1998, in order to delineate the northern horizontal extent of the elevated concentrations. Three horizontal delineation samples (BG-NE-1, BG-NE-2 and BG-NE-3) were obtained at a depth of 0-1' bsg. All of the samples were analyzed for PPMs. No PPMs were detected at concentrations above the RDCSCC.