



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Ocean Resources Conservation and Assessment
Hazardous Materials Response and Assessment Division
Coastal Resources Coordination Branch
290 Broadway, 18th Floor
New York, New York 10007

December 14, 1995

Sherrel Henry
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
290 Broadway
New York, NY 10007

Dear Ms. Henry:

Thank you for the opportunity to review the Draft Phase II Remedial Investigation (RI) Work Plan for the Island Chemical Company, Inc. Site in St. Croix, U.S. Virgin Islands. The following comments are submitted on behalf of the National Oceanic and Atmospheric Administration (NOAA).

During the October 6, 1995 meeting with the potentially responsible parties (PRPs) for the Island Chemical Site, NOAA expressed concern that the RI Work Plan stated, "The metals concentrations reported do not appear to pose a cause for concern." NOAA noted that the benchmark values used for screening existing sediment data (maximum USGS background values and RCRA ALs) were not appropriate. NOAA recommended using the Effects Range-Median (ER-Ms) and Effects Range-Low values (Long and MacDonald, 1992) and the USGS mean values for screening. The Phase II RI Work Plan does indicate that the potential for metals at the site to impact the environment will be evaluated. The tasks to be completed, as described on Page 4, include research of historical metals use at the site and performance of statistical analysis on existing USGS data and data collected during previous investigations to confirm background metals concentrations. The work plan should also note that, in addition to comparison to background values, screening of existing sediment data against benchmark values with some ecological relevance such as the ER-Ms and ER-Ls (the RCRA ALs are human health based values only). Without this, it will be impossible to evaluate the potential for metals at the site to impact the environment.

NOAA had also expressed concern that the RI Work Plan did not include any activities to describe the habitats present along the gut, downstream of the site to the Caribbean Sea, or any additional sampling of the River Gut. As far as NOAA is concerned, the previous sampling from the storm drains and River Gut showed that sediment from those areas contained levels of site-related metals (especially zinc) that are of concern (i.e., the levels have previously been shown to be toxic to ecological receptors in other studies.) A review of the Site Investigation (SI) Report prepared by EPA in 1991 indicated sediment sampling of the storm drains onsite and/or the River Gut was conducted on at least two separate occasions. Sediment samples were collected from 11 locations in the River Gut in January 1986 and (see Figure 13 attached) and from five locations in 1991 (see Figure 3 attached). The 1986 samples indicated that zinc was present at the furthest downstream location from the site at 871 ppm, well in excess of the ER-M of 410 ppm. Though zinc was also found to be present upgradient of the site, there was an obvious increase in the levels present directly adjacent from the site. The 1991 samples collected from four different locations in the River Gut showed the zinc values 53.9 to 82.3

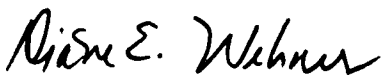


305278

ppm and a fifth sample collected from on onsite storm drain was reported to have 1500 ppm zinc (suggesting the presence of a significant onsite source of zinc). It is unclear why three of the four sampling locations in the River Gut from the 1991 sampling are basically upgradient of any surface runoff from the site, which is primarily to the northeast. As such, only one of the samples can be considered downgradient. The Phase II Work Plan notes that the potential for conditions at the site to have affected coastal regions will be evaluated and on Page 4 states that the locations previously sampled between the site and the Caribbean Sea will be identified and used, in conjunction with additional site characterization activities, to assess the potential for the site to impact the environment. The work plan does not appear to include any additional site characterization activities that would allow for this assessment. In addition, on Page 5, the work plan states that, "Because the coverage provided by sediment samples previously collected appears to be sufficient to characterize the site, no further sediment sampling is needed." NOAA feels this conclusion is premature as the activity listed on Page 4 was supposed to identify these areas. NOAA has already reviewed the previous sampling and does not feel that it is sufficient to characterize the extent of offsite migration of metals (especially zinc). Since the River Gut drains directly into the Caribbean Sea only 1.4 km from the site, natural resources of concern to NOAA would be expected to utilize the Caribbean Sea near the mouth of River Gut; it is also possible that these resources are found closer to the site if mangrove or tidal habitats that may be present upstream from the Caribbean Sea (the SI indicated sensitive environments including wetlands and coral reefs are present downgradient of the site). The Phase II RI Work Plan should include tasks to identify the type of habitat and potential receptors present on the site proper and downgradient in River Gut and additional sediment sampling to properly characterize the extent of offsite migration of contaminants. NOAA would be available to provide assistance in selecting additional locations in need of sampling in the River Gut.

Please contact me at (212)637-3259 should you have any questions regarding these comments. I would be happy to participate in any upcoming meetings or conference calls to further discuss these issues with EPA and the PRPs.

Sincerely,



Diane E. Wehner
NOAA Coastal Resource Coordinator

cc: Shari Stevens, BTAG
Gina Ferreira PSB
Robert Hargrove, EIB



GW6
VIPA #2

GW5
VIPA #1

LEGEND

- SEPTIC TANK
- //// STORM DRAINS
- VEGETATION
- ⊕ GROUNDWATER SAMPLE
- SEDIMENT SAMPLE
- SOIL SAMPLE

SAMPLE LOCATION MAP

VI CHEMICAL, ST. CROIX, U.S.V.I.

NOT TO SCALE

FAIRPLAINS #1
GW4

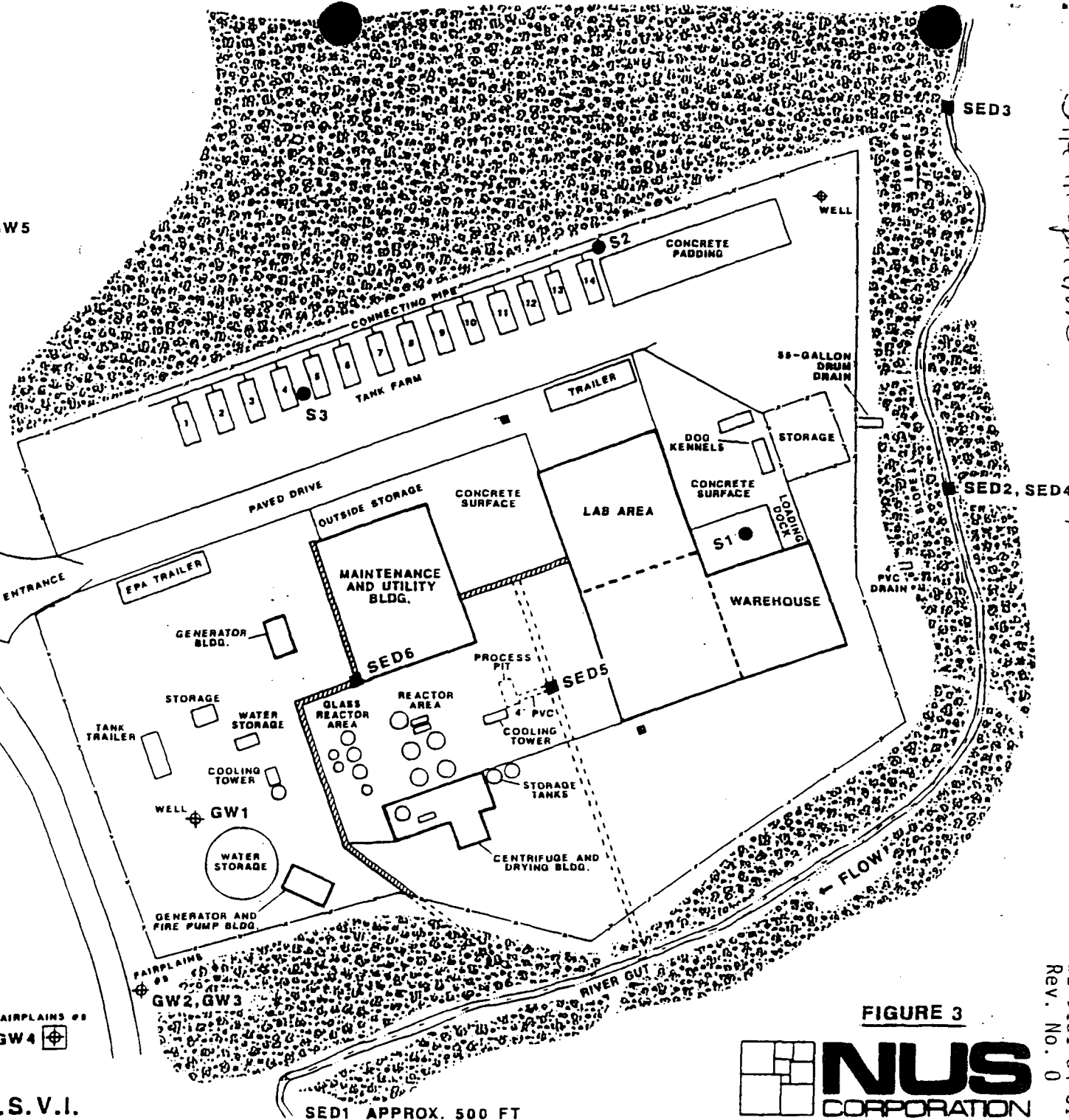


FIGURE 3

NUS
CORPORATION

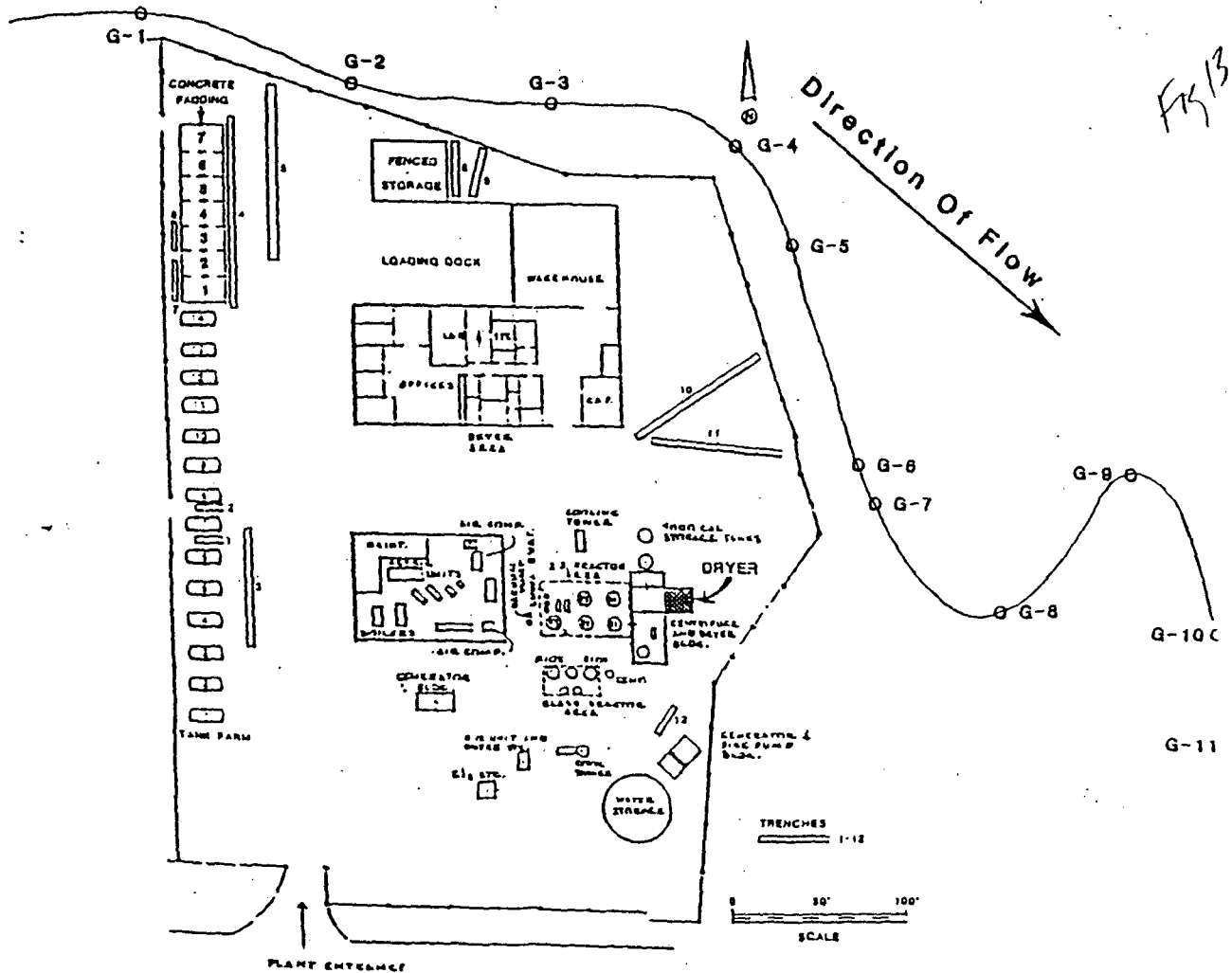
02-9101-04-S1
Rev. No. 0

Site Inspection
Feb 28, 1991

305280

Figure 13

Gut Soil Sampling Program



ENVIRO-SCIENCES, INC.

Client ICC

Drawn By — Date —

Revised By JLM Date 7/3/86

Scale As Shown