1. INTRODUCTION

2. BACKGROUND AND STATEMENT OF ISSUES

3. METHODS

4. RESULTS

5. DISCUSSION

6. CONCLUSION
samples obtained from the sampling locations in Figure 7 are listed in Appendix B, Table 2.

appropriate [X] The maximum concentration of the PHE in the catchments where PHE is
interactions between different PHE compounds. Therefore, adding the effects of multiple PHEs is
PHEs in the sample, the available tools could either include indirect or no applicable
because the concentrations that would have the same carcinogenic potential as the mixture of
the exposure profile calculation (TPC) concentration. The TPC is an estimate of the profile
the overall carcinogenic (cancer-causing) potential of a mixture of PHE is often expressed as

activities at the MPIC.

are a chemical of potential concern (CoP) because of its historical association with the
mechanism of action. Although it did not exceed the EPA's RfD, 2-naphthylamine was included
the NRP database as a most exposed (substance), because of its similarity to 2-
mechanism of action was included in the NRP database as a most exposed (substance), because of its similarity to 2-

In addition, 2-naphthylamine, a semi-volatile aromatic compound (SVOC), was detected in
represent the plausible and important carcinogenic potential in the catchments.

the NRP for positive evidence. SEPT exceeded 20% of the maximum exposure concentration in
found in concentrations higher than the NRP. A rise was found at a concentration higher than
maximum concentration of metals of concern include arsenic, bromide and manganese (see
which catches per month, they would be in excess of approximately 44% of mean
1 pound of catch per month (600 million catch); the catches are estimated to be 2 to 3 pounds of
which catch per month. For the entire program, the average catch is estimated to be 10 pounds of

NEO-Cancer risk. The studies estimate a median cancer risk of 1.5 in" for the greater
areas were based on a survey of existing compensation programs conducted in 1992 for the Greater
catchper month over 15 years (see Appendix B, Table 1). Because the TPC exceeded the RfD, additional,

The scenario used to estimate exposure assumed that the exposure to occupational radiation is an
period of 15 years.

excess cancer in 10,000 (1 x 10^4) people exposed for a lifetime, with an assumed exposure

of one

and MRIs are estimates of daily exposures to

(PE) observed with the cancer incidence (CIR) approach, which is estimated in one

the cancer risk compensation values in this health consultation are based on the
considered here are unlikely to cause adverse noncancer health effects even if exposure occurs

(PE) observed with the cancer incidence (CIR) approach, which is estimated in one

considered here are unlikely to cause adverse noncancer health effects even if exposure occurs
instead of 6 years, and secondly, an additional variable was included, the EPA chemical-specific
calculation of cancer risk levels with two differences. First, a duration of 50 years was used
in the same way used to calculate the estimated exposure doses for human cancer effects were used in the
same way for the cancer dose for the Incidence of human in laboratory animals as [6]. The
human carcinogenic and benzosulfide, classified by EPA as a probable human carcinogen
Crystals collected from Big Creek and the Unlimited Tribune combined exposure, a known

Assessing Cancer Exposure

See Appendix B, Table 4.

incremental, relative to 2,3,7,8-TCDD exceeded RBDs or MRLs used for noncancer endpoints.

manuscript. In addition, none of the calculated estimated exposure dose for aquatic fishes.

According to this information, none of the calculated estimated exposure doses for aquatic fishes

duration of 15 years (used for carcinogenic risk) to 10 years (used for non-carcinogenic risk) to 5 years,
because the maximum of the estimated exposure doses for noncancer effects requires taking into account

Calculation of the estimated exposure doses for noncancer effects requires taking into account

body weight, rainfall, and the frequency (meals/day) as well as the duration (years) of

The calculated of the estimated exposure doses for noncancer effects requires taking into account

in this case, it is as if the contaminant's concentration of several variables.

Assessing how much of a chemical exists the

Body weight, rainfall, and the frequency (meals/day) as well as the duration (years) of

some as an exposure dose, which is the amount of a chemical that an individual is exposed to on a

The calculated of the estimated exposure doses for noncancer effects requires taking into account

Where the exposure risk is acceptable. In the assessment of the potential for human exposure to

CDP, 2,3,7,8-TCDD, and 2,3,7,8 TCDD.

Severe factors affect human exposure to crystals, including the rate of ingestion or compartmental

C. Exposure Analysis

Assessing Noncancer Exposure

[1] C. Exposure Analysis
In August 2001, SEFT staff administered a needs assessment to the residents living near the Waterboro site. A summary of the findings can be located in the Waterboro site

In February 2001, SEFT staff conducted a public meeting to present the Public Health Assessment (PHA) to the Waterboro community. [3]

The health condition in the Waterboro community is more expedient fashion. Data in a searchable, sortable format, allowing SEFT to provide public health intervention.

In May 2003, SEFT obtained EPA Human Health Risk Assessment (HHRA) summary.

Past Actions

VI. PUBLIC HEALTH ACTION PLAN

None.

V. RECOMMENDATIONS

A. Children

- Children consume more food and liquids in proportion to their body weight than do adults. SEFT evaluated the potential public health hazards to children who may ingest or absorb contaminated water supplies.
- Children’s exposures to toxicants may be more significant than adults’ because children consume more food and liquids in proportion to their body weight than do adults.
- Children exposed to toxicants may be more sensitive to the effects of toxicants than adults.
- Children can also differ from adults in absorption, metabolism,
- Children and reproductive systems, and nervous systems, have not functions.

B. Conclusions

- SEFT found no public health hazard to
- SEFT concluded the potential public health hazards to children who may ingest or absorb contaminated water supplies.
- Children’s exposures to toxicants may be more significant than adults’ because children consume more food and liquids in proportion to their body weight than do adults.
- Children can also differ from adults in absorption, metabolism,
- Children and reproductive systems, and nervous systems, have not functions.

- Children

- Conclusions

- SEFT found no public health hazard to
- SEFT concluded the potential public health hazards to children who may ingest or absorb contaminated water supplies.
REFERENCES
Environmental Health Scientist
Tammy McKee, M.S.
ATSDR Technical Project Officer

Regional Operations, Region VI
George Feltrey
ATSDR Senior Regional Representative

Environmental Health Science Coordinator
Darice Olexa, M.S.P.H.

Telephone Number: (304) 293-7020 or toll-free (888) 293-7020
Section of Environmental Epidemiology and Toxicology
Office of Public Health
Louisiana Department of Health and Hospitals

PREPARED BY THE HEALTH CONSULTATION
Chief, State Program Section, DHAC, ATSDR
Roberta Rafter

Consultation and concurs with the findings.
The Division of Health Assessment and Consultation, ATSDR, has reviewed this public health

Technical Project Officer, SPS, SSAB, DHAC
Tamme McGee, MS

approved methodology and procedures at the time the health consultation was begun.

This Marion Pressure Cleaning Company Site, a Review of Biora Data, health consultation was
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<th>Source</th>
<th>Comparison Values</th>
<th>Concentration Detected</th>
<th>Maximum Concentration of Potential Concern</th>
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**EPA Chronic**

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<th>Oral RfD</th>
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**Other RfD**

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**Range**

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**Mercury**

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**Table 1.** Concentrations of potential concern detected in crawfish whole body tissue.

Sampling: Marion Pressure Testing Company, Union Parish, Louisiana.

<table>
<thead>
<tr>
<th>June-September 2000</th>
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Note: RfD - Reference dose.
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Table 3: Maximum Poly-dethiothreitol dithio-p-dioxins / poly-chlorinated dibenzofurans (PCDDs/PCDFs) Concentrations Detected in Dairy Cows Whose Body Tissues Contain Poly-chlorinated Dibenzo-p-dioxins (PCDDs) and Dibenzofurans (PCDFs) in the U.S. Dairy Industry.

September 2000.

<table>
<thead>
<tr>
<th>mg/kg/day</th>
<th>Year</th>
<th>Month</th>
<th>Year</th>
<th>Month</th>
<th>6 meals per day</th>
<th>2 meals per day</th>
<th>kg</th>
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<td>9.9E-06</td>
<td>0.7</td>
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<td>8.6E-07</td>
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<td>2.2E-05</td>
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<tr>
<td>9.9E-07</td>
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<td>1.0E-06</td>
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Company, Union Parish, Louisiana, (June-September 2000).

Effects Based on Whole Body Crayfish Samples; Methane, Pressure, Treatment, Reading.

Table 5. Calculated Estimated Exposure Dose for Benzene (a) Tolerable for Cancer Health.