U.S. Filter Westates

U.S. ENVIRONMENTAL PROTECTION AGENCY • REGION 9 • SAN FRANCISCO, CA • FEBRUARY 2004

Specifics about Westates' Proposed Risk Assessment

Upon request by EPA, Westates has prepared a workplan describing how they plan to conduct their risk assessment. This fact sheet provides specific information about what Westates has proposed. If you would like further information about the proposed workplan, you may write or call Patrick Wilson, EPA's toxicologist, or Wenona Wilson, Community Involvement Coordinator.

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WHAT ARE THE MAJOR STEPS IN THE PROPOSED RISK ASSESSMENT?

In their Risk Assessment Workplan, Westates proposes four major steps which are typical for risk assessments. An explanation of these steps follows below.

Step 1: Hazard Identification

Step 2: Exposure Assessment

Step 3: Risk Characterization

Step 4: Uncertainty Analysis

STEP 1: HAZARD IDENTIFICATION

In this step, Westates proposes the contaminants they intend to evaluate in the risk assessment.

Westates plans to evaluate about 160 chemical compounds or classes of compounds, including: metals, inorganic gases, organics, dioxins/furans, and PCBs.

SEE THE REVERSE FOR STEPS 3 AND 4 OF THE RISK ASSESSMENT

STEP 2: EXPOSURE ASSESSMENT

In this step, Westates proposes the methods they will use to estimate the amount of contaminants from their operations that may reach people in the community. There are three parts to the exposure assessment:

Measure releases of contaminants -- In this effort, which is found in Westates' proposed Air Emissions Test Plan, Westates proposes how they will measure stack and fugitive emissions. "Fugitive emissions" are emissions of contaminants coming from tanks, valves, or other equipment during normal operations at Westates. Westates also proposes how they will measure their wastewater discharges to the local sewer system.

Air dispersion and deposition modelling -- In this effort, Westates proposes to use a computer model to predict how the contaminants will move through the air, and where they will be deposited onto the land or water.

Specific pathways of human exposure -- In this effort, Westates proposes to look at several pathways of human exposure. "Pathways" refers to the ways that contaminants from Westates may arrive at or near a person, and enter the person's body. Please see the reverse for more information about possible pathways.

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STEP 3: RISK CHARACTERIZATION

In this step, Westates will combine the results of Steps 1 and 2, which determined the amount of contaminants from Westates' emissions and the magnitude of human exposure to the contaminants. In Step 3, Westates proposes the methods they will use to estimate the likelihood of harm from stack, fugitive, and wastewater emissions.

Westates proposes to estimate the following health risks from stack and wastewater emissions:

- long-term cancer risk
- long-term non-cancer risk
- short-term inhalation risk
- lead risk
- dioxin/furan risk
- infant exposure to dioxin/furans

Westates proposes to estimate the following health risks from fugitive emissions.

- long-term cancer risk
- long-term non-cancer risk
- short-term inhalation risk

Your comments on Westates' risk assessment are important to us.

We would like to hear your comments on:

Activities in your community which may be affected by emissions from Westates.

Sensitive populations in your community which may be affected by Westates.

Unique characteristics of your community which may result in increased exposure to emissions from Westates.

STEP 4: UNCERTAINTY ANALYSIS

In this step, Westates proposes to discuss uncertainties involved in performing this risk assessment. Westates also proposes to discuss the manner in which the uncertainties may influence the estimate of ecological and human health impacts. Westates proposes to look at several forms of uncertainty which are typical in risk assessments. These are:

- the analysis and characterization of "dioxin-like PCBs" (PCBs which are similar to dioxins)
- the uncertainty arising from unidentified organic compounds released during Westates' operations
- the uncertainty associated with the hazard of "tentatively identified compounds", which are compounds that have not been completely identified

MORE INFORMATION ABOUT PATHWAYS OF HUMAN EXPOSURE

In the exposure assessment, Westates has identified the following potential pathways of human exposure:

- inhalation (breathing) of contaminants from stack releases
- ingestion (eating) of soil, produce, beef, chicken, eggs, fish, pork, dairy, game, or breast milk which may have been impacted from stack or wastewater emissions

In addition to adult and child residents of the nearby community and on-site workers, Westates has identified the following subgroups as potential high-end receptors of contaminants from Westates. "High-end receptors" are people in the community who are more likely to be exposed to contaminants from Westates than the typical resident.

- subsistence fishing
- subsistence hunting
- subsistence agriculture