

AmeriTies West 2005 City-wide Attitudinal Odor Survey and Town Hall Meeting Status Report

Introduction

As an ongoing review of the Tie Treatment Plant in The Dalles, the Department of Environmental Quality (DEQ), AmeriTies West, and concerned citizens continue to address odors emanating from the plant. In 2005, AmeriTies West, a startup company, began operations to continue treating ties in The Dalles in the same manner as Kerr McGee (KMC) did before the company took over operations. In the Fall of 2005, DEQ sent out an attitudinal survey that gathered subjective information on odors from the Tie Treatment Plant in conjunction with the workgroup. The results of the survey are described below. In addition, DEQ held a Town Hall meeting to discuss the plant. A summary of the meeting is included in this report.

Background

The tie treatment plant has been operating in The Dalles since the 1940's. DEQ issued the first air quality permit for the plant in 1977. KMC operated the plant since 1987 and AmeriTies West has operated the plant since 2005. When KMC took over the operations, they made several improvements at the plant that reduced emissions. During the permit renewal process in 2002, DEQ received numerous comments about odors and other issues. The permit was issued as proposed, but the DEQ committed to work with the concerned citizens and KMC to try and resolve the issues. A workgroup was formed with the company, DEQ and some concerned citizens.

The workgroup met for the first time in July 2002 and continued to meet periodically through the next three years. When AmeriTies took over operations, the workgroup still met and the new company responded to the workgroup. The Company is still required to accept and respond to complaints in accordance with their permit. Odor surveys were collected during key months of the year and results of these odor surveys can be found on DEQ's website at <http://www.deq.state.or.us/er/localprojects/tieOdors.htm> in a document called "2004 Workgroup Status Report". Toward the end of this project, fewer and fewer surveys were turned in and the Workgroup wasn't sure if the survey was confusing or participants simply lost interest in the project. DEQ agreed to conduct a wide reaching odor attitudinal survey to assess the feelings of the community. Because of the difficulty in narrowing the scope of the survey, DEQ decided to send the questionnaire out to all residents in 97058 zip code. DEQ also held a town hall type forum regarding AmeriTies.

Attitudinal Survey

An attitudinal survey form was developed that asked the resident to rank the odor of the Tie Treatment Plant and to assess the odor in relationship to other odors in the community. The survey instrument is located at <http://www.deq.state.or.us/er/localprojects/tieOdors.htm>. The survey instrument also included space for comments.

Results of the Attitudinal Survey

Several inferences can be made from the results of the AmeriTie attitudinal survey, but the survey did not adequately quantify an issue of odors at the Tie Plant. Several issues surfaced when analyzing the results, some suggesting the questions were unclear to the respondents in the actual survey instrument. Despite the survey's design flaws, one conclusion can be drawn from the public's response, namely, there is an odor problem in The Dalles, and the Tie Plant is one of many sources of odor.

A total of 724 surveys out of 8,757 mailed were returned to DEQ. Some individuals felt the Tie Treatment Plant odor was not significant, and others felt the odor was very significant. Some felt the odor had increased and others felt the odor had decreased over the years. Some felt odors from the Cherry Growers Brine operation, woodstove and open burning smoke, and agricultural pesticide spraying were more significant than the Tie Treatment plant odors and others felt the Tie Treatment plant odors were more significant. Most of the respondents held a strong opinion on the subject of odors in The Dalles. Some identified certain types of odors and others identified other types of odors.

When respondents were asked to quantify the impact of the odor, the survey results were unclear because the questionnaire did not ask for return addresses. Addresses were not requested because DEQ wanted to keep the survey anonymous so honest responses could be recorded. This caused a problem because it was unclear who might be most affected by the odors. Without addresses of the respondents the responses cannot be segmented by those likely to be most affected. Individuals who responded may not have been bothered by the odors because they didn't live in the part of town where odors were emanating.

The survey results are identified below in tabular form.

Tie Plant Odor Questionnaire Results (724 respondents)

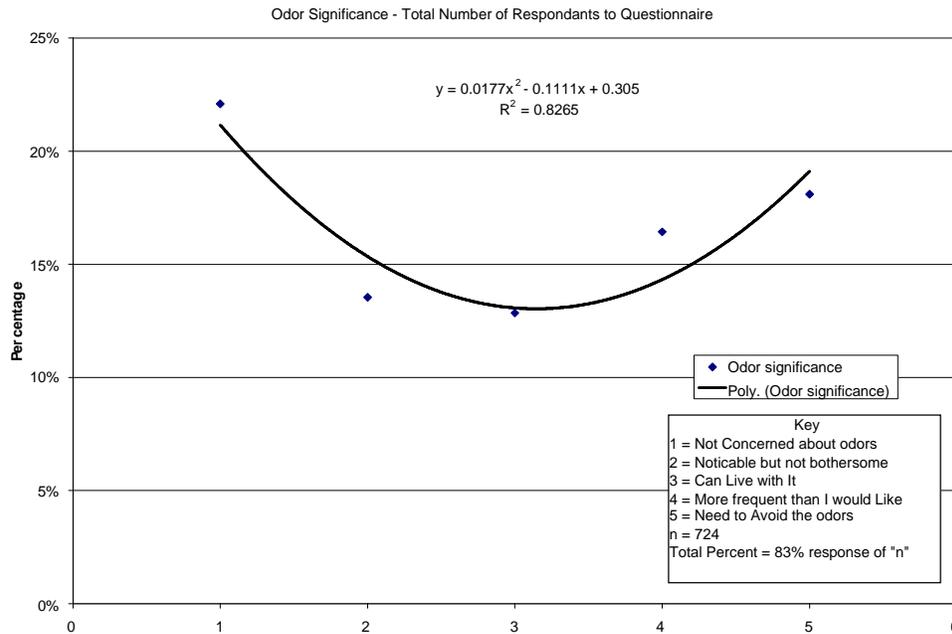
| Question | | Result | Percent* |
|--|----------------|--------|----------|
| Do you notice unpleasant odors in The Dalles? | Yes | 552 | 76% |
| Do you notice unpleasant odors in The Dalles? | No | 147 | 20% |
| If so, can you identify the source? | Yes | 485 | 67% |
| If so, can you identify the source? | No | 54 | 7% |
| Other sources identified: | Woodstove | 89 | 12% |
| | open burning | 100 | 14% |
| | agriculture | 155 | 21% |
| | WW Treatment | 180 | 25% |
| | Creosote | 288 | 40% |
| | Other | 36 | 5% |
| Odors do not occur enough to be concerned about | | 160 | 22% |
| Odors are noticeable, but not bothersome | | 98 | 14% |
| Odors are not very pleasant by can live with it | | 93 | 13% |
| Odors are unpleasant, more frequent than I would Like | | 119 | 16% |
| Odors are very unpleasant causes me to avoid odor | | 131 | 18% |
| In comparison to the past, Odors from tie treatment are: | More Frequent | 65 | 9% |
| | Same | 220 | 30% |
| | Less Frequent | 172 | 24% |
| Other sources identified in the comments: | Cherry Growers | 208 | 29% |
| | Ag Spraying | 29 | 4% |
| | Aluminum Plant | 5 | 1% |
| | Woodstoves | 28 | 4% |
| | Open Burning** | 41 | 6% |
| | WW Treatment | 27 | 4% |
| | Total | 303 | 42% |

*Percent of total respondents (n = 724)

**Includes Burn Barrels

Odor Significance

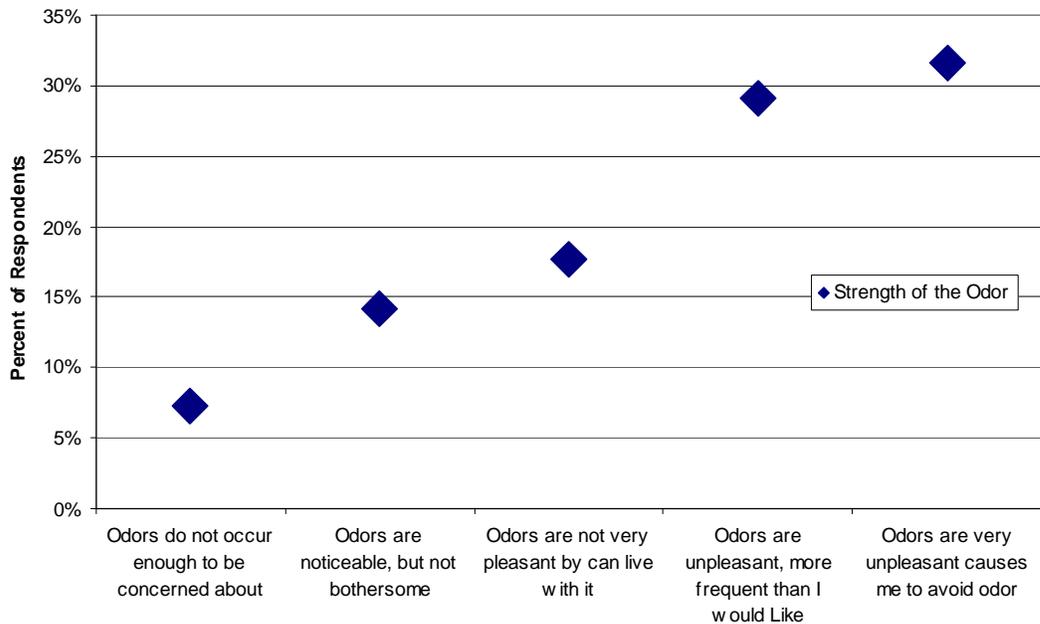
One question asked how significant the odors were from the Tie Treatment plant. However, it is unclear whether each respondent responded to the question in relationship to the Tie Treatment Plant or odors in The Dalles in general. Regardless, the results of this question are displayed graphically below.



Odor Impact

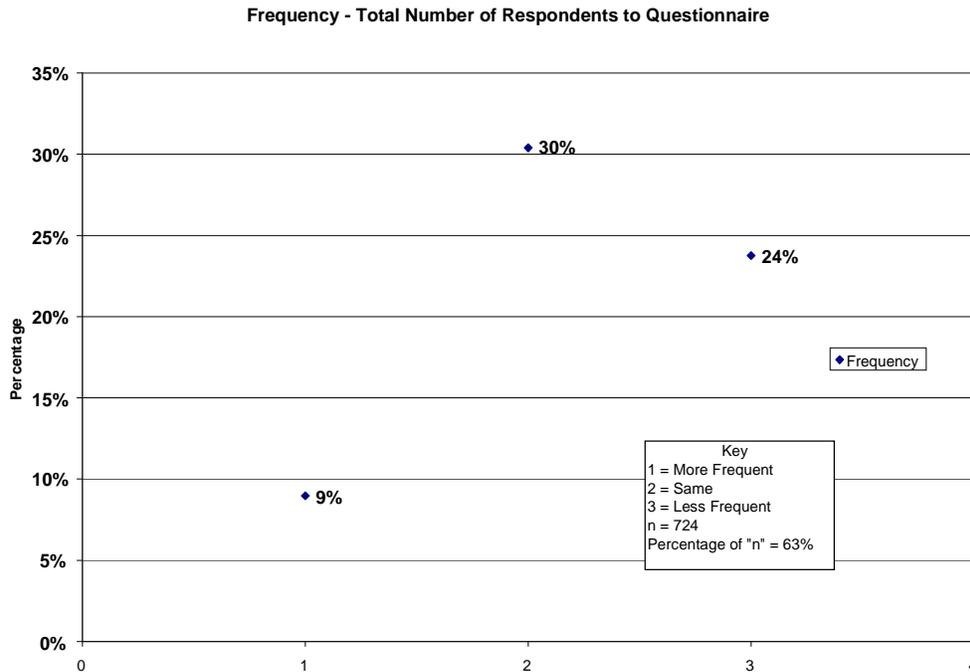
When respondents were asked to quantify the impact of the odor, the survey results were unclear because some respondents responded to the creosote odor and others responded to odors in general. In the chart above it shows that the general population is split on whether there are significant odors in The Dalles. However, in the chart below for those who marked creosote as an odor, more individuals stated the odor was greater than they would like or needed to avoid the odor. For example, 288 out of 724 respondents identified creosote as an odor in The Dalles. Of those 288 individuals 175 respondents (60.8%) indicated that the odors were unpleasant or very unpleasant.

For Those Respondents Who Stated Creosote Was an Odor in The Community,
These Respondents Ranked the Strength of the Odor



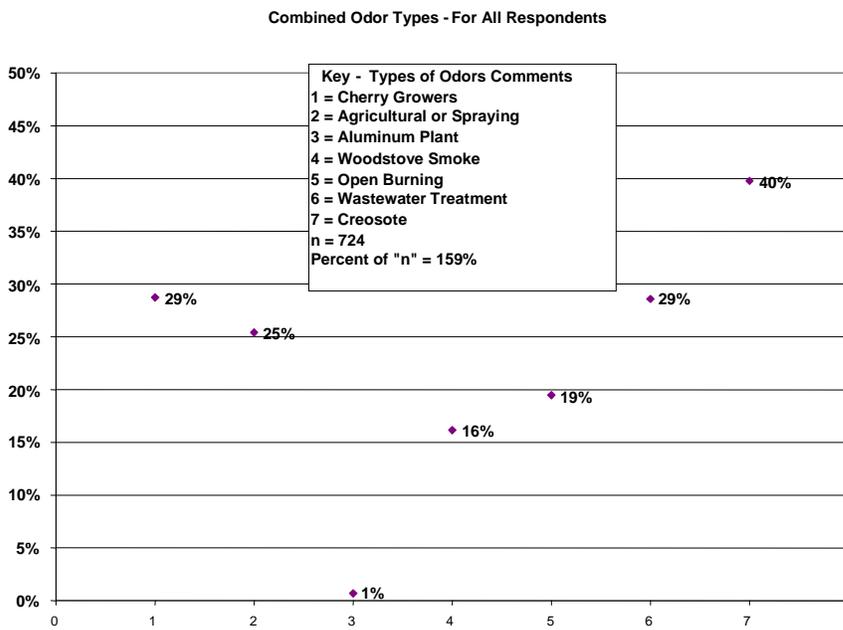
Odor Frequency

Another question asked the respondent if the Tie Treatment Plant odors were more frequent than in the past, less frequent than in the past or the same as in the past. Again, this question may have been confused by some of the respondents as meaning odors in general. Nevertheless, here are the responses in graphical form.



Odor Sources

The questionnaire also asked the types of odors smelled in The Dalles. Several sources were circled on the questionnaire in a pre-selected source list. Additionally, the written comments often identified the various sources of odors. For instance, 69% of those who provided comments stated that Cherry Growers were a major source of odors. Some commenters pointed out that we missed a major source of odors when we didn't list the Cherry Growers as a potential source. Often, more than one source was identified per respondent. DEQ combined the number of circled types of odors with the number of comment odor types and placed them in the graph below. Some respondents circled and commented on the same source, and some listed them separately. The graph below shows the number combined circled and commented sources of odors.



Town Hall Meeting Results

On September 14, 2005, DEQ held a town hall meeting to review activities at the AmeriTies facility and to respond to questions from the public. The meeting also discussed preliminary results of the questionnaire. The meeting raised several issues, some of which were resolved at the meeting. Some issues raised at the meeting were:

Questionnaire:

- The respondents could have smelled anything and attributed it to creosote. Response: yes.
- The survey didn't have people's addresses. Response: that is correct, but some volunteered addresses and we correlated those with the general respondent.
- We want to see the demographics of the survey. Response: DEQ correlated those near the plant with the general response and determined there were no significant differences, except the responses were sharpened. (See results above).
- Comment: The questionnaire wasn't fair and was a witch-hunt against AmeriTies.

General:

- The town stinks. There is a recognized cost to controlling odors. Can we bring the odors to a negligible level? Response: We need to define negligible and we do not have a good handle on costs. Regarding the tie plant, the plant manager stated we are currently at the lower end of the negligible curve without significant costs.

The Facility:

- The facility appears to be below permitted levels on DEQ's permit. DEQ response: yes.
- Is the facility still using a misting spray to control odors? AmeriTies response: yes.
- Comment: The facility is doing what they can, but there are times we must go inside to avoid the odors.
- Has there been a health risk assessment? DEQ response: There have not been studies, but there are worker safety results at the plant where the highest concentration is likely and J. H. Baxter in Eugene has done some ambient sampling results that we have studied.
- Is it possible to conduct some monitoring? DEQ response: yes, that may be one of our next steps.
- Comment: There are more cases of cancer in The Dalles than elsewhere and the only solution is to move the plant 20 miles to the east.
- Comment: I have been born and raised here and the plant has controlled odors to a point where I can live with it.
- Comment: Everyone's olfactory response is different. We should know what persists in the air and there should be monitoring. I would like to stress the monitoring of VOC in the surrounding neighborhood and it should be a permit condition.
- From what I understand the plant manager to say, Kerr McGee had deep pockets and AmeriTies doesn't. Is this correct? AmeriTies response: Yes.
- Rhetorical question: There isn't a large group of people here. If this is such a problem, where are all the people?

- The odor frequency appears greater. Are you treating wetter material? AmeriTies response: The charges are staying in the retorts longer. If anything, there should be less odor.
- I'm frustrated. The odor appears stronger for 12 months of the year. Yet, we need to keep jobs. Isn't there anything we can do? AmeriTies response: I've heard the frustration and the company is considering other technology, but it is important to balance this with economic interests.
- Have you discussed a new technology with the railroad? AmeriTies response: yes, there is an ongoing dialog, but we aren't far enough along to describe what might happen.

Recommendations

1. Continue periodic involvement of the workgroup.
 - Check in at least annually with the workgroup to assess the year's odors.
 - Meet more often if conditions warrant.
2. Continue the Quality Action Team (QAT) started under KMC and continued with AmeriTies which is comprised of 2 to 3 plant employees. This QAT will be charged with identifying areas of potential odors and seeking solutions or modifications that would minimize or eliminate odors related to plant operations. The QAT will investigate the following areas:
 - Retort doors
 - Drip Pad Area
 - Treated Tie Inventory
 - Other areas that may produce odors

The QAT will meet with or provide input through the plant manager to the workgroup during the scheduled meetings. In addition, the company is exploring other tie treatment opportunities for a long term solution.

3. Monitoring:

The Department in association with the Workgroup plan to assess naphthalene levels within the community by conducting a screening analysis during the Spring of 2008. Community members living directly south of the plant plan to participate in this sampling event. Three samples will be collected over a 24-hour period. One sample will be located away from the plant to measure background levels. One will be located on the bluff above the plant and another at a residence further up the hillside. The sample results will be shared with AmeriTies and the workgroup. The results will be compared to background, worker safety standards set by OR-OSHA, and to ambient air quality references set by EPA.