I-205 Toll Project

MEMORANDUM

Date	February 11, 2021
To	Lucinda Broussard, Mandy Putney, Michael Holthoff, Ben White, and Teresa Nowicki (ODOT)
From	April Ryckman, WSP
Subject	Hazardous Materials Methodology Memorandum – Draft #4
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INTRODUCTION

This memorandum describes the methods that will be used in the I-205 Toll Project (Project) Environmental Assessment (EA) analysis to evaluate hazardous materials impacts of the Project alternatives. The analysis and results will be documented in the EA that will be developed to comply with federal guidelines and regulations, including the National Environmental Policy Act (NEPA) and local and state policies, standards, and regulations.

The hazardous materials analysis will evaluate impacts from the construction, operations, and maintenance of the Project and will identify mitigation measures as needed.

LEGAL REGULATIONS AND STANDARDS

Laws, Plans, Policies, Regulations, and Guidance

The analysis will consider NEPA, Council on Environmental Quality (CEQ), and Federal Highway Administration (FHWA) guidance on preparing NEPA documents.

Federal and state laws regulate the generation, sale, use, transportation, and disposal of hazardous materials in the API, as well as cleanup and reuse of sites contaminated by hazardous materials. Regulatory records will be reviewed to determine which sites may impact the API.

Federal Environmental Protection Agency Laws

The following federal rules and regulations will guide data collection for hazardous material sites in the API. These rules and regulations are implemented and enforced by the U.S. Environmental Protection Agency (EPA):

- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 1980 (42 United States Code [USC] 9601 et seq.)
- Resource Conservation and Recovery Act (RCRA) of 1976 (42 USC 6901 et seq.)
- The Superfund Amendments and Reauthorization Act (SARA) of 1986 (42 USC 9601 et seq.)

- The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) of 1972 (7 USC 136 et seq.)
- The Toxic Substances Control Act (TSCA) (15 USC [C. 53] 2601-2692)

State of Oregon and Local Government Regulations

The following state and local rules and regulations will be used to guide data collection for hazardous materials sites in the API. These rules and regulations are implemented and enforced by the Oregon Department of Environmental Quality (DEQ):

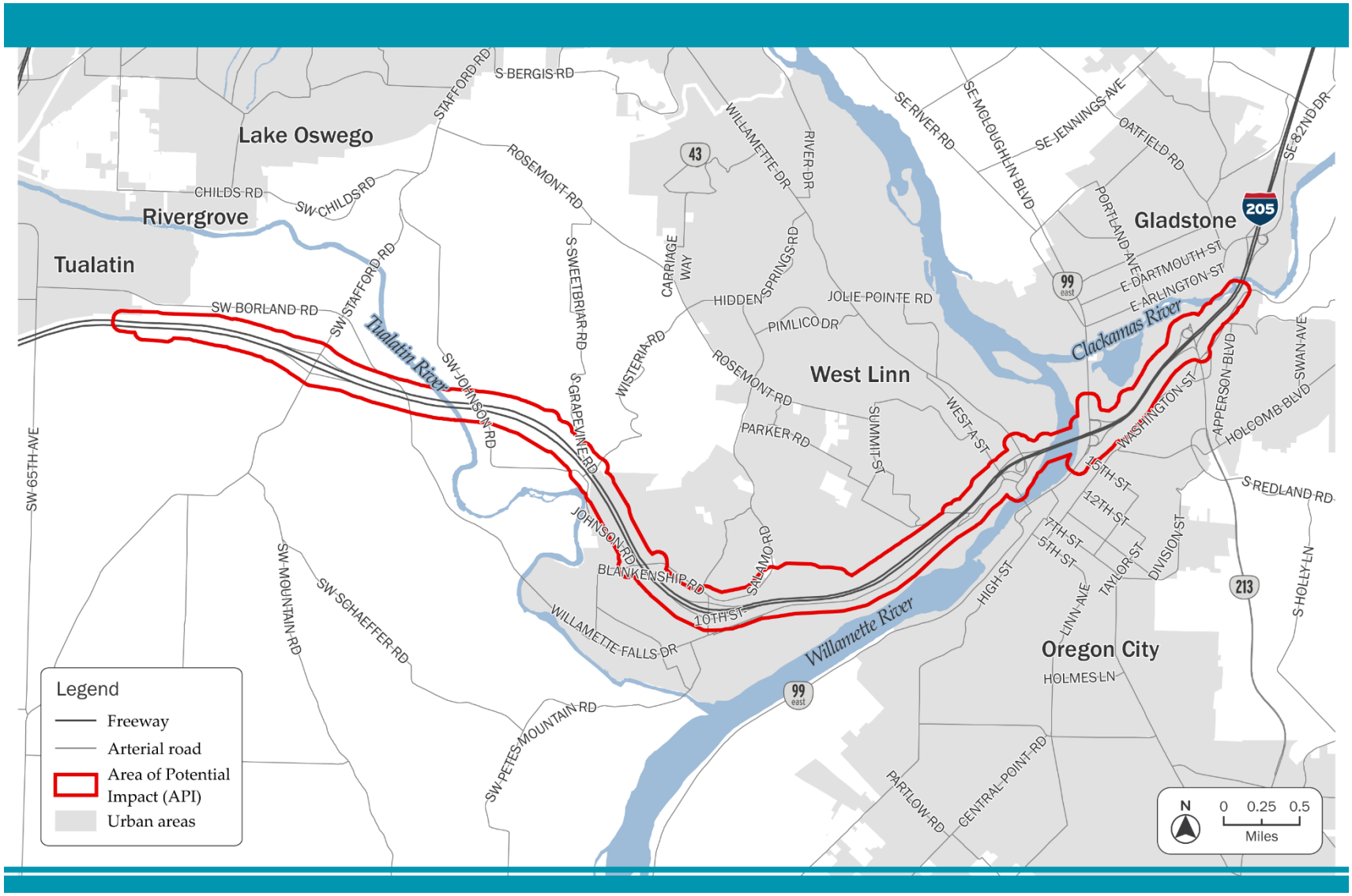
- Hazardous Waste and Hazardous Materials I and Hazardous Waste and Hazardous Materials II (2003 Oregon Revised Statutes [ORS] 465 and 466, as amended)
- Underground Storage Tank Rules, 1990 (Oregon Administrative Rules [OAR] 340-150)
- Residential Heating Oil Underground Storage Tanks, 1998 (OAR 340-177)
- Groundwater Quality Protection, 1998 (OAR 340-040)
- Environmental Hazards Notice, 1998 (OAR 340-130)
- Standards Applicable for Dry Cleaning Stores Facilities and Dry Stores, 2002 (OAR 340-124)
- Illegal Drug Lab Cleanup Assistance, 1999 (OAR 340-140)
- Hazardous Waste Management System, 2003 (OAR 340-100 to 110, 120, 124 and 142)
- Hazardous Substance Remedial Action Rules, 1997 (OAR 340-122)

AREA OF POTENTIAL IMPACT

The area of potential impact (API) is the geographic boundary within which impacts to the environment could occur with the Project alternatives. The API encompasses the area anticipated for direct and indirect long-term and short-term impacts to hazardous materials resulting from construction and operation of the Project. As part of the collection of data from federal, state, and certain local records of potential contamination sources in the vicinity of the API, the standard regulatory records and search radius is 300 feet from the edge of right-of-way to the API, as shown in Figure 1, which is anticipated to encompass any ground that would be disturbed as part of Project construction.

Prior to preparation of the EA, this API may be modified once the alternatives to be studied in the EA have been identified and projected traffic volumes have been refined.

Figure 1. Preliminary Hazardous Materials API



DESCRIBING THE AFFECTED ENVIRONMENT

Published Sources, Databases, and Land Use Review

Data used in the 2018 Documented Categorical Exclusion (DCE) prepared for the I-205 Improvements Project will be reviewed to confirm its relevancy and applicability to this study. The Project team will conduct a desktop analysis to assess existing conditions within the API for the presence or suspected presence of hazardous substances and petroleum products; assessment procedures were developed to comply with NEPA and to address other federal, state, and local regulations and policies. This assessment will include review of the following:

- Federal and state environmental databases for potential sites within the API
- Historical and existing land uses
- Previously-prepared Level 1 Hazardous Material Corridor Study and Hazardous Building Materials Paper Survey for the I-205 Improvements Project (HDR 2018)

The desktop analysis will contain a review of historical data regarding land use and geologic and groundwater conditions; the analysis' plan will include the following research:

- Updated review of readily available information regarding geologic and groundwater conditions within the API to assess the potential for known or suspected contaminants to affect the Project. This includes the Oregon Water Resource Department well logs and DEQ database information regarding known soil, sediment, and groundwater contamination sites within the API.
- Review of available historical aerial photographs, Sanborn Fire Insurance Maps, US Geological Survey (USGS) Topographic Maps, and County Assessor records.

Other Data Sources

As available and appropriate, data from previous technical reports and agency files, including city, county, and Oregon DEQ, and reviews will be collected on sites showing indicators of concern during the regulatory database review or Sanborn map review. Indicators of concern include active and known DEQ or EPA cleanup sites, operations or facilities that have potential to impact the subsurface, and other known or perceived environmental conditions, spills, etc., that are found to have a potential to impact the Project. In some cases, specific DEQ file reviews could be conducted to gain further understanding of the environmental conditions on a specific parcel or site.

Contacts and Coordination

During the hazardous materials analysis, the following agencies may be contacted for data and other information related to hazardous materials:

- Clackamas County
- Oregon DEQ

- Oregon Water Resources Division
- Oregon State Fire Marshall

Field Surveys or Testing

No field surveys or testing will be conducted for the hazardous materials analysis.

IMPACT ASSESSMENT METHODS

The hazardous materials evaluation will consider known sites within the API, with an emphasis on properties to be acquired, if any. The current status of regulatory and cleanup actions will also be considered. The evaluation will reflect the type of contamination and the media that are contaminated and will apply professional judgment to assess the level of concern that contamination may pose for a potential acquisition property, including the level of cost and difficulty in cleanup. The potential that contamination may have migrated or could still migrate to other properties, such as through groundwater will also be evaluated. Hazardous materials impacts are most likely limited and would occur only in the areas where toll gantries and any associated utility connections are constructed. Impacts to hazardous materials are anticipated to be minimal.

The following will be considered to help determine impacts of high concern:

- Would Project operation pose a risk to human health or the environment by exposing hazardous substances that may not be managed using standard best management practices?
- Would Project construction activities expose or exacerbate contamination, posing a risk to human health or the environment? This evaluation will rely on applicable state or federal standards and an assessment of exposure pathways and potential receptors.
- If it is necessary to acquire hazardous materials sites to build the Project, what are the sites that may pose the highest concerns for cleanup, potential Project delays, or increased exposure to people or the environment?
- Does one of the Project Alternatives or a potential design option provide an opportunity to avoid or minimize the above risks?

Long-Term Impact Assessment Methods

The evaluation of direct long-term impacts will generally include the need to conduct or maintain remedial actions to address contaminated materials that may remain on an existing contaminated site after construction is complete. In many cases, these could result in long-term beneficial effects (construction within a contaminated site typically requires remedial actions to remove or manage contaminated materials, which promotes an overall long-term beneficial effect). Long-term remedial actions could include deed restrictions, engineering controls, placement of soil caps, groundwater treatment systems, or similar technologies and approach. In any case, it is in the best interest of the Project and the environment to identify contaminated sites prior to construction, and either avoid them or determine appropriate courses of action prior to acquisition.

Short-Term Impact Assessment Methods

The assessment will evaluate the direct short-term impacts from hazardous materials that could arise during construction. Short-term impacts are typically associated with the following risks:

- Leakage or a spill associated with construction activities, equipment, and materials including fuel, lubricants, and other hazardous substances
- Exposure to or migration of contaminants encountered in soil or groundwater during construction
- Exposure to hazardous materials in the event of demolition of buildings or structures, including lead-based paint, asbestos-containing materials, and other hazardous substances

Indirect Impacts Assessment Methods

Indirect impacts occur later in time (after Project completion) or are farther removed in distance, but are still reasonably foreseeable in the future. The evaluation and discussion of indirect impacts on hazardous materials will be qualitative.

Cumulative Impacts Assessment Methods

The analysis of cumulative impacts to hazardous materials is described in the I-205 Toll Project Cumulative Impacts Methodology Memorandum.

MITIGATION APPROACH

Potential mitigation measures will be identified for adverse hazardous materials impacts, if any. The analysis will cover measures for avoiding or reducing adverse hazardous materials impacts during Project development, including during and after construction. More detailed, site-specific measures would be developed during final design and in compliance with applicable regulations, particularly if the Project involves construction within hazardous materials sites.

When evaluating potential mitigation measures, the following will be implemented (listed in order of preference):

- Avoid the impact by not taking a certain action or parts of an action; for example, adjust the Project such that it would no longer acquire property potentially impacted by hazardous materials.
- Minimize the impact by limiting the degree or magnitude of the action and its implementation; for example, adjust the Project design to avoid hazardous materials sites or provide limited or passive remedial actions, such as soil capping, to achieve Project construction.
- Mitigate the impact by repairing, rehabilitating, or restoring the affected environment; for example, complete remedial actions in accordance with DEQ requirements on hazardous materials sites that may impact the Project.

If necessary, to reduce the risk of liability and decrease the short-term effects of hazardous materials sites to the Project, a Phase I ESA would be completed at each site proposed for acquisition or easement in advanced design stages. As the Project enters later development stages, including advanced design, property acquisition, and construction, more detailed environmental engineering investigation and analysis would be conducted, including subsurface characterization and the development of appropriate site-specific management plans (contaminated media management plan, spill prevention plan, etc.).

PERFORMANCE MEASURES

1 presents a preliminary list of performance measures identified to evaluate how the alternatives compare in terms of impacts and benefits to hazardous materials:

Table 1. Hazardous Materials Performance Measures

Performance Measure	Tool and/or Data Source used for Assessment of Measure
Number of contaminated sites (low, medium, and high risk) disturbed by project construction	Data will be collected from Federal and state environmental databases for potential sites within the API, historical and existing land uses, previously-prepared environmental reports, and review of historical data regarding land use and geologic and groundwater conditions

Additional performance measures may be identified during the course of analysis.

REFERENCES

HDR. 2018. Final Level 1 Hazardous Material Corridor Study and Hazardous Building Materials Paper Survey, I-205: Stafford Road to OR 213.