IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

Waste Management and Remediation Division

58.01.24 – Standards and Procedures for Application of Risk Based Corrective Action at Petroleum Release Sites

To whom does this rule apply?
This rule applies to owners and operators of petroleum storage tank systems where a petroleum release has occurred.

What is the purpose of this rule?
This rule establishes standards and procedures to determine what risk based corrective action measures should be applied to property where a petroleum release has occurred. These rules supplement the assessment and cleanup requirements under IDAPA 58.01.02, Sections 851 and 852, "Water Quality Standards."

What is the legal authority for the agency to promulgate this rule?
This rule implements the following statutes passed by the Idaho Legislature:

Health and Safety:
- Chapter 1, Title 39, Idaho Code – Environmental Quality
- Chapter 36, Title 39, Idaho Code – Water Quality
- Chapter 44, Title 39, Idaho Code – Hazardous Waste Management
- Chapter 72, Title 39, Idaho Code – Idaho Land Remediation Act
- Chapter 74, Title 39, Idaho Code – Idaho Solid Waste Facilities Act

Who do I contact for more information on this rule?

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58.01.24 – STANDARDS AND PROCEDURES FOR APPLICATION OF RISK BASED CORRECTIVE ACTION AT PETROLEUM RELEASE SITES

000. LEGAL AUTHORITY.
Section 39-107(7), and Chapters 1, 36, 44, 72 and 74, Title 39, Idaho Code. (7-1-25)

001. SCOPE.
These rules establish standards and procedures to determine whether and what measures should be applied to property subject to petroleum release response, assessment, and corrective action. These rules do not apply to previously closed releases. The Department will not require any additional evaluation of petroleum sites previously granted closure unless there is a new petroleum release. (7-1-25)

002. ADMINISTRATIVE PROVISIONS.
Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, "Contested Case Rules and Rules for Protection and Disclosure of Records." (3-31-22)

003. -- 009. (RESERVED)

010. DEFINITIONS.
The terms" department," "person," and "waters" have the same meaning provided for those terms in Section 39-103, Idaho Code. The term "environmental covenant" has the same meaning provided for that term in Section 55-3002, Idaho Code. The terms "petroleum" and "release" have the same meaning provided for those terms in Section 39-7203, Idaho Code. (7-1-25)

01. Acceptable Target Hazard Index. The summation of the hazard quotients of all chemicals and routes of exposure to which a receptor is exposed and equal to a value of one (1). If the initial value exceeds one (1), further evaluation, including individual organs, can be completed. (3-31-22)

02. Acceptable Target Hazard Quotient. The ratio of a dose of a single chemical over a specified time period to a reference dose for that chemical derived for a similar exposure period. A hazard quotient of one (1) for a specified receptor when applied to individual chemicals. A hazard quotient of 0.1 (zero point one) for a specified receptor when multiple chemicals and/or exposure routes are present. (7-1-25)

03. Acceptable Target Risk Level. Acceptable risk level for human exposure to carcinogens. For exposure to individual carcinogens a lifetime excess cancer risk of less than or equal to one per one million (1 E-6) for a receptor at a reasonable maximum exposure. For combined exposure to all carcinogens and routes of exposure, a lifetime excess cancer risk of less than or equal to one per one hundred thousand (1 E-5) for a receptor at a reasonable maximum exposure. (3-31-22)

04. Activity and Use Limitations. Restrictions or obligations, with respect to real property, created by an environmental covenant. Activity and use limitations may include, but are not limited to, land use controls, activity and use restrictions, environmental monitoring requirements, and site access and security measures. Also known as institutional controls. (3-31-22)

05. Background. Media specific concentration of a chemical that is consistently present in the environment in the vicinity of a site which is the result of human activities unrelated to release(s) from that site under investigation. (3-31-22)

06. Corrective Action Plan (CAP). A document, subject to approval by the Department, that describes: (7-1-25)

a. The actions and measures that will be implemented to ensure that adequate protection of human health and the environment is achieved and maintained.; and (7-1-25)

b. The applicable remediation standards. May also be known as a risk management plan or a remediation workplan. (7-1-25)

07. Delineated Source Water Protection Area. The physical area around a public drinking water supply well or surface water intake identified in an approved Department source water assessment that contributes water to a well (the zone of contribution). The size and shape of the delineated source water area depend on the delineation method and site-specific factors. The area may be mapped as a one thousand (1000) ft. fixed radius around the well (transient public water systems) or divided into three (3), six (6), and ten (10) year time of travel zones (e.g. zones indicating the number of years necessary for a particle of water to reach a well or surface water

intake). For the purposes of these rules, where groundwater time of travel zones have been delineated, the three (3) year time of travel zone shall apply. Where surface water systems have been delineated, this area includes a five hundred (500) ft. buffer around a lake or reservoir, or a five hundred (500) ft. buffer along the four (4) hour upstream time of travel of streams. See the Idaho Source Water Assessment Plan. (7-1-25)

08. Dissolved Product. Petroleum product constituents found in solution with water. (7-1-25)

09. Exposure Point Concentration. The average concentration of a chemical to which receptors are exposed over a specified duration within a specified geographical area. The exposure point concentration is typically a conservative estimate of the mean. Also referred to as the representative concentration. (3-31-22)

10. Method Detection Limit. The minimum concentration of a substance that can be reported with ninety-nine percent (99%) confidence is greater than zero. Method detection limits can be operator, method, laboratory, and matrix specific. (3-31-22)

11. Operator. Any person presently or who was at any time during a release in control of, or responsible for, the daily operation of the petroleum storage tank (PST) system. (3-31-22)

12. Owner. Any person who owns or owned a PST system any time during a release and the current owner of the property where the PST system is or was located. (3-31-22)

13. Petroleum Storage Tank (PST) System. Any one (1) or combination of storage tanks or other containers, including pipes connected thereto, dispensing equipment, and other connected ancillary equipment, and stationary or mobile equipment, that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. (3-31-22)

14. Practical Quantitation Limit. The lowest concentration of a chemical that can be reliably quantified among laboratories within specified limits of precision and accuracy for a specific laboratory analytical method during routine laboratory operating conditions. Specified limits of precision and accuracy are the criteria listed in the calibration specifications or quality control specifications of an analytical method. Practical quantitation limits can be operator, method, laboratory, and matrix specific. (3-31-22)

15. Reasonable Maximum Exposure. The highest exposure that can be reasonably expected to occur for a human or other living organism at a site under current and potential future site use. (3-31-22)

16. Reference Dose. For chronic or long-term exposures an estimate of a daily exposure level to a chemical for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious noncarcinogenic effects during a lifetime, expressed in units of milligrams per kilogram body weight per day. (3-31-22)

17. Remediation Standard. A media specific concentration that, when attained, is considered to provide adequate protection of human health and the environment. (7-1-25)

18. Residential Use. Residential use means land uses that include residential or sensitive populations. (7-1-25)

19. Risk-Based Concentration.The residual media specific concentration of a chemical that is determined to be protective of human health and the environment under specified exposure conditions. (3-31-22)

20. Risk Evaluation. The process used to determine the probability of an adverse effect due to the presence of a chemical. A risk evaluation includes development of a conceptual site model, identification of the chemicals present in environmental media, assessment of exposure and exposure pathways, assessment of the toxicity of the chemicals present, characterization of human risks, and characterization of impacts or risks to the environment. (7-1-25)

21. Screening Level. A media specific concentration that, based on specified levels of risk or hazard, exposure pathways and routes of exposure, expected land use, and exposure factors, can be used to assess the need for

additional investigation or corrective action. (7-1-25)

22. Slope Factor. A plausible upper-bound estimate of the probability of an individual developing cancer as a result of a lifetime of exposure to a particular level of a potential carcinogen. It is expressed as the probability of a response per unit intake of a chemical over a lifetime. (3-31-22)

011. -- 059. (RESERVED)

060. PETROLEUM RELEASE REPORTING, INVESTIGATION, AND CONFIRMATION.

01. Reporting of Suspected Releases. Owners and operators of petroleum storage tank (PST) systems must report to the Department within twenty-four (24) hours and follow the procedures in Subsection 060.03 for any of the following conditions. (7-1-25)

a. The discovery by owners and operators or others of a petroleum release at the PST site or in the surrounding area other than spills and overfills described in Subsection 060.04, such as the presence of free product or dissolved product in nearby surface water or groundwater or vapors in soils, basements, sewer or utility lines. (7-1-25)

b. Unusual operating conditions observed by owners and operators such as the erratic behavior of product dispensing equipment, the sudden loss of product from the PST system, liquid in the interstitial space of secondarily contained systems, or an unexplained presence of water in the PST system, unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced. (7-1-25)

c. Monitoring results, including investigation of an alarm, from a release detection method that indicate a release may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result. (7-1-25)

02. Investigation Due to Off-Site Impacts. When required by the Department, owners and operators must follow the procedures in Subsection 060.03 to determine if the PST system is the source of off-site impacts. These impacts include the discovery of petroleum, such as the presence of free product or dissolved product in nearby surface water or groundwater or vapors in soils, basements, sewer, and utility lines. (7-1-25)

03. Release Investigation and Confirmation Steps. Unless corrective action is initiated in accordance with Section 061, owners and operators must immediately investigate and confirm all suspected releases of petroleum within seven (7) days, or another time period specified by the Department, of discovery and using at least one (1) of the following steps or another procedure approved by the Department: (7-1-25)

a. Conduct tightness tests or, as appropriate, secondary containment testing that determine whether a leak exists in any portion of the PST system, including the tank, the attached delivery piping, a breach of either wall of the secondary containment, and any connected tanks and piping. All such portions can be tested either separately or together or in combinations thereof. (7-1-25)

i. Repair, replace or upgrade the PST system in accordance with applicable federal, state and local laws, and begin corrective action in accordance with Section 061 if the test results for the system, tank, or delivery piping indicate that a leak exists. (7-1-25)

ii. Further investigation is not required if the test results for the system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release. (7-1-25)

iii. Conduct a site check as described in Subsection 060.03.b. if the test results for the system, tank, and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release. (7-1-25)

b. Measure for the presence of a release where contamination is most likely to be present. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the nature of the petroleum, the type of initial alarm or cause for suspicion, the type of backfill, the depth of groundwater, and other

factors appropriate for identifying the presence and source of the release. Methods of sample collection and sample analysis are subject to these rules and Department approval. (7-1-25)

i. If a release has occurred, begin corrective action in accordance with Section 061. (7-1-25)

ii. If test results for the PST system do not indicate that a release has occurred, further investigation is not required. (7-1-25)

04. Reporting and Cleanup of Above Ground Releases. Owners and operators shall contain and immediately clean up an above ground release of petroleum only after identifying and mitigating any fire, explosion, and vapor hazards. (7-1-25)

a. A release that exceeds twenty-five (25) gallons or that causes a sheen on nearby surface water must be reported to the Department within twenty-four (24) hours and begin corrective action in accordance with Section 061. (7-1-25)

b. A release that is less than twenty-five (25) gallons and does not cause a sheen on nearby surface water must be reported to the Department only if cleanup cannot be accomplished within twenty-four (24) hours. (7-1-25)

061. PETROLEUM RELEASE RESPONSE AND CORRECTIVE ACTION.

01. Release Response. Upon confirmation of a petroleum release in accordance with Section 060 or after a release from the PST system is identified in any other manner, owners and operators must perform the following initial response actions within twenty-four (24) hours: (7-1-25)

a. Identify and mitigate fire, explosion and vapor hazards; (7-1-25)

b. Take immediate action to prevent any further release of petroleum into the environment; and (7-1-25)

c. Report the release to the Department. (7-1-25)

02. Initial Abatement Measures. Unless directed to do otherwise by the Department, owners and operators must perform the following abatement measures: (7-1-25)

a. Remove as much of the petroleum from the leaking PST system as is necessary to prevent further release to the environment; (7-1-25)

b. Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils, surface water and groundwater; (7-1-25)

c. Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the PST site and entered into subsurface structures such as sewers or basements; and (7-1-25)

d. Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, the owner and operator must comply with applicable state and local requirements. (7-1-25)

03. Initial Site Characterization. Unless directed to do otherwise by the Department, owners and operators must assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in Subsection 061.02. This information includes, but is not necessarily limited to the following data: (7-1-25)

a. On the nature and estimated quantity of release; (7-1-25)

b. From available sources and site investigations concerning the following factors: surrounding populations, water quality, use and approximate location of wells potentially affected by the release, subsurface soil condition, locations of subsurface sewers, climatological conditions, and land use; and (7-1-25)

c. From measurements that assess the site for the presence of petroleum contamination including measurements: (7-1-25)

i. For the presence of a release where contamination is most likely to be present, unless the presence and source of the release have been confirmed in accordance with the site check described in Subsection 060.03.b. or the closure site assessments required by applicable federal, state, or local laws. Sample types, sample locations and analytical methods are subject to these rules and Department approval and will be based on consideration of the nature of the petroleum, the type of backfill, depth to groundwater, and other factors appropriate for identifying the presence and source of the release; and (7-1-25)

ii. To determine the presence of free product. (7-1-25)

d. Within forty-five (45) days of release confirmation, or another time specified by the Department, owners and operators must submit the information collected in compliance with Subsection 061.03 to the Department in a manner that demonstrates its applicability and technical adequacy to be reviewed as follows, if the Department determines that the information shows: (7-1-25)

i. That no further corrective action is required, owners and operators will be notified accordingly; (7-1-25)

ii. Contamination is limited to soils, owners and operators must treat or dispose of contaminated soils in accordance with Department guidelines, and need not perform any further corrective action; (7-1-25)

iii. That any of the conditions in Subsections 061.05.a. through 061.05.c. exist, owners and operators must comply with the provisions in Subsections 061.04 through 061.07. (7-1-25)

04. Free Product Removal. At sites where investigations under Subsection 061.03.c.ii. indicate the presence of free product, owners and operators must remove free product to the maximum extent practicable as determined by the Department while continuing, as necessary, any actions initiated under Subsections 061.01 through 061.03 or preparing for actions under Subsections 061.05 and 061.06. In meeting the provisions of Subsection 061.04, owners and operators must: (7-1-25)

a. Conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated areas by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery by-products in compliance with applicable local, state and federal regulations; (7-1-25)

b. Use abatement of free product migration as a minimum objective for the design of the free product removal system; (7-1-25)

c. Handle any flammable products in a safe and competent manner to prevent fires or explosions; and (7-1-25)

d. Unless directed to do otherwise by the Department, submit to the Department for review and approval, within forty-five (45) days after confirming a release, a free product removal report that provides at least the following information: (7-1-25)

i. The name of the person(s) responsible for implementing the free product removal measures; (7-1-25)

ii. The estimated quantity, type and thickness of free product observed or measured in wells, boreholes, and excavations; (7-1-25)

iii. The type of free product recovery system used; (7-1-25)

iv. Whether any discharge will take place on-site or off-site during the recovery operation and where this discharge will be located; (7-1-25)

v. The type of treatment applied to, and the effluent quality expected from, any discharge; (7-1-25)

vi. The steps that have been or are being taken to obtain necessary permits for any discharge; and (7-1-25)

vii. The disposition of the recovered free product. (7-1-25)

05. Investigations for Soil and Water Cleanup. If any of the conditions in Subsections 061.05.a. through 061.05.c. exist, and unless directed to do otherwise by the Department, owners and operators must notify the Department and conduct investigations in accordance with Subsection 061.05.d. of the release, the release site, and the surrounding area possibly affected by the release in order to determine the full extent and location of soils contaminated by the petroleum release and the presence and concentrations of dissolved product contamination in the groundwater or surface water: (7-1-25)

a. There is evidence that groundwater or surface water has been affected by the release such as found during release confirmation or previous corrective action measures; (7-1-25)

b. Free product is found to need recovery in compliance with Subsection 061.04; (7-1-25)

c. There is evidence that contaminated soils may affect nearby groundwater, surface water or the public health and have not been treated or disposed of in accordance with Subsection 061.03.d.ii. (7-1-25)

d. Unless determined otherwise by the Department, investigations conducted under Subsection 061.05 are subject to these rules and include, but are not limited to: (7-1-25)

i. The physical and chemical characteristics of the petroleum product including its toxicity, persistence, and potential for migration; (7-1-25)

ii. The type and age of the PST system, inventory loss, and type of containment failure; (7-1-25)

iii. The hydrogeologic characteristics of the release site and the surrounding area; (7-1-25)

iv. The background concentrations of contaminants in soil, surface water and groundwater; (7-1-25)

v. A site drawing, showing boring and monitoring well locations, nearby structures, underground utilities, drainage ditches, streams, suspected locations of leakage, direction of groundwater flow, and any domestic or irrigation wells within a one half (1/2) mile radius of the site; (7-1-25)

vi. Information on ownership and use of any well identified pursuant to Subsection 061.05.d.v.; (7-1-25)

vii. Site borings and well logs and rationale for choosing drilling locations, and a description of methods and equipment used for all water and soil sampling; (7-1-25)

viii. A description of contaminant stratigraphy with accompanying geologic cross-section drawings; (7-1-25)

ix. A demonstration and description of the horizontal and vertical extent of contamination, free product thickness, modes and rate of contaminant transport, and concentrations of dissolved constituents in surface water and groundwater; (7-1-25)

x. The potential effects of residual contamination on nearby surface water and groundwater; and

(7-1-25)

xi. A discussion of laboratory analytical methods and information pertaining to laboratory certification. (7-1-25)

e. Owners and operators must submit the information collected in investigating the release site in compliance with Subsection 061.05 for the Department's review and approval in accordance with a schedule established by the Department as provided in Subsection 061.07. (7-1-25)

06. CAP. At any point after reviewing the information submitted in compliance with Subsections 061.01 through 061.05, the Department may require owners and operators to submit additional information or to develop and submit a CAP for responding to contaminated soils, surface water and groundwater. If a CAP is required, owners and operators must submit the CAP according to a consent order or a schedule and criteria established by the Department as provided in Subsection 061.07. (7-1-25)

a. The Department will approve the CAP only after ensuring that implementation of the plan will adequately protect human health and the environment. In making this determination, the Department will consider the following factors as appropriate: (7-1-25)

i. The maximum contaminant levels for drinking water or other health-based levels for water and soil that consider the potential exposure pathway of the petroleum product; (7-1-25)

ii. The physical and chemical characteristics of the petroleum product including its toxicity, persistence, and potential for migration; (7-1-25)

iii. The hydrogeologic characteristics of the release site and the surrounding area; (7-1-25)

iv. The proximity, quality, and current and future uses of nearby surface water and groundwater; (7-1-25)

v. The potential effects of residual contamination on nearby surface water and groundwater; and (7-1-25)

vi. Other information assembled in compliance with Section 060. (7-1-25)

b. The CAP must include, but not be limited to, the following information as applicable: (7-1-25)

i. Description of remediation standards, points of exposure, and points of compliance where remediation standards will be achieved; (7-1-25)

ii. Description of remedial strategy and actions that will be taken to achieve the remediation standards; (7-1-25)

iii. Current and reasonably anticipated future land use and use of on-site and immediately adjacent off-site groundwater and surface water; (7-1-25)

iv. Activity and use limitations, if any, that will be required as part of the remedial strategy; (7-1-25)

v. Proposed environmental covenants, developed to implement activity and use limitations, in accordance with Section 600; (7-1-25)

vi. Estimated timeline for completion; (7-1-25)

vii. Monitoring Plan to monitor effectiveness of remedial actions; (7-1-25)

viii. Description of practical quantitation limits as they apply; and (7-1-25)

ix. Description of background concentrations as they apply. (7-1-25)

c. Upon approval of the CAP pursuant to Subsection 200.04 or as directed by the Department, owners and operators must: (7-1-25)

i. Implement the plan including modification to the plan made by the Department; and (7-1-25)

ii. Monitor, evaluate, and report the results of implementing the CAP in accordance with a consent order or a schedule and criteria established by the Department as provided in Subsection 061.07. (7-1-25)

d. Owners and operators may begin cleanup of soil, surface water, and groundwater before the CAP is approved provided that they: (7-1-25)

i. Notify the Department of their intention to begin cleanup; (7-1-25)

ii. Comply with any conditions imposed by the Department, including halting cleanup or mitigating adverse consequences from cleanup activities; and (7-1-25)

iii. Incorporate the self-initiated cleanup measures in the CAP submitted to the Department for approval. (7-1-25)

07. Compliance. If the Department determines that any of the conditions in 061.05.a. through 061.05.c. exist, owners and operators will be given an opportunity to enter into a consent order with the Department. (7-1-25)

a. The Department will send owners and operators a consent order that sets forth at least the following schedules: (7-1-25)

i. For owners and operators to submit the information collected in investigating the release site in compliance with Subsection 061.05; (7-1-25)

ii. For owners and operators to submit, and criteria for, a CAP in compliance with Subsection 061.06; (7-1-25)

iii. For the Department to review, modify, and approve the site release investigation and CAP; and (7-1-25)

iv. For owners and operators to implement a CAP, and monitor, evaluate, and report the results of implementing the CAP. (7-1-25)

b. Owners and operators will be given thirty (30) days from receipt of the consent order in which to reach an agreement with the Department regarding the terms of the consent order. (7-1-25)

c. If owners and operators cannot reach an agreement with the Department within thirty (30) days, the Department will establish a schedule and criteria which owners and operators must comply in order to meet the provisions of Subsections 061.05 and 061.06. (7-1-25)

062. -- 099. (RESERVED)

100. CHEMICALS EVALUATED AT PETROLEUM RELEASE SITES.

01. General Applicability. The chemicals listed in Section 800, table of chemicals of interest for various petroleum products, will be evaluated based on the specific petroleum product or products known or suspected to have been released. (7-1-25)

02. Additional Chemicals. Evaluation of non-petroleum chemicals in addition to those in Section 800 may be required by the Department when there is a reasonable basis based on site-specific information. A reasonable

basis will be demonstrated by the Department when it can show documentation of releases or suspected releases of other non-petroleum chemicals. (7-1-25)

101. -- 199. (RESERVED)

200. RISK EVALUATION PROCESS.
The following risk evaluation process must be used for petroleum releases EPA's RSL Calculator (https://epa-prgs.ornl.gov/cgi-bin/chemicals/cslsearch) and VISL Calculator (https://epa-visl.ornl.gov/cgi-bin/vislsearch), or other approved methods, may be used for screening and risk evaluations. (7-1-25)

01. Screening Evaluation. The screening evaluation may be performed at any time during the release response and corrective action process and must include, at a minimum: (7-1-25)

a. Collection of media-specific (soil, surface water, groundwater, soil vapor) data; (7-1-25)

b. Identification of maximum soil, groundwater, and soil vapor petroleum chemical concentrations for the chemicals identified in Section 800 as appropriate for the petroleum product or products released; and (7-1-25)

c. Comparison of the maximum media-specific petroleum contaminant concentrations to the EPA regional screening levels (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables). If the maximum media-specific petroleum contaminant concentrations at a site do not exceed the screening levels, the owner and/or operator may petition for site closure, subject to other Department regulatory obligations. If the maximum media-specific concentrations at a site exceed the screening levels, the owner and/or operator must proceed to: (7-1-25)

i. Adopt the screening levels as remediation standards and develop a CAP to achieve those levels pursuant to Subsection 061.06.b.; or (7-1-25)

ii. Perform a site-specific risk evaluation pursuant to Section 300. The Department may require the collection of additional site-specific data prior to the approval of the risk evaluation. (7-1-25)

02. Results of Risk Evaluation. If the results of the approved risk evaluation do not exceed the acceptable target risk level, acceptable target hazard quotient, or acceptable target hazard index specified in Section 300, the owner and/or operator may petition for site closure, subject to other Department regulatory obligations. If the results of the approved risk evaluation indicate exceedance of the acceptable target risk level, acceptable target hazard quotient, or acceptable target hazard index specified in Section 300, the risk evaluation must: (7-1-25)

a. Be modified by collection of additional site-specific data, or review of chemical toxicological information, and resubmitted to the Department for review and approval; or (3-31-22)

b. Provide the basis for the development of risk-based concentrations, establishment of remediation standards as described in Section 400, and development of a CAP. (7-1-25)

03. Department Review and Approval of Risk Evaluation or CAP. Within thirty (30) days of receipt of the risk evaluation or CAP, the Department will provide in writing either approval, approval with modifications, or rejection of the risk evaluation or CAP. If the Department rejects the risk evaluation or CAP, it will notify the owner and/or operator in writing specifying the reasons for the rejection. If the Department needs additional time to review the documents, it will provide written notice to the owner and/or operator that additional time to review is necessary and will include an estimated time for review. Extension for review time will not exceed one hundred eighty (180) days without a reasonable basis and written notice to the owner and/or operator. (7-1-25)

201. -- 299. (RESERVED)

300. SITE-SPECIFIC RISK EVALUATION.

01. General Requirements. The general requirements for human health risk evaluations must include, at a minimum: (7-1-25)

a. A conceptual site model that describes contaminant sources; release mechanisms; the magnitude, spatial extent, and temporal trends of petroleum contamination in all affected media; transport routes; current and reasonably likely future land use and human receptors; and relevant exposure scenarios. (7-1-25)

b. Toxicity information derived from appropriate sources including, but not limited to, those listed in Subsection 300.01.e. (7-1-25)

c. Data quality objectives and sampling approaches based on the conceptual site model that support the risk evaluation and risk management process. (3-31-22)

d. Estimated exposure point concentrations for a reasonable maximum exposure based on a conservative estimate of the mean of concentrations of chemicals that would be contacted by an exposed receptor. (3-31-22)

e. Exposure analysis including identification of contaminants of concern, potentially exposed populations, pathways and routes of exposure, exposure point concentrations and their derivation, and a quantitative estimate of reasonable maximum exposure for both current and reasonably likely future land and water use scenarios. The EPA RSL and VISL calculators are appropriate sources of reasonable maximum exposure factor information. Alternative sources must be reasonably justified. (7-1-25)

f. Risk characterization presenting the quantitative human health risks and a qualitative and quantitative assessment of uncertainty for each portion of the risk evaluation. (3-31-22)

g. Risk evaluations may include the use of transport and fate models, subject to Department approval of the model and the data to be used for the parameters specified in the model. (3-31-22)

02. Specific Requirements. Human health risk evaluations must, at a minimum: (7-1-25)

a. Utilize an acceptable target risk level as defined in Section 010; (3-31-22)

b. Utilize an acceptable target hazard index as defined in Section 010; (3-31-22)

c. Utilize an acceptable target hazard quotient as defined in Section 010; (3-31-22)

d. Evaluate the potential for exposure from: (3-31-22)

i. Groundwater ingestion; (7-1-25)

ii. Direct contact with contaminated soils resulting from soil ingestion, dermal contact, and inhalation of particulates and vapors; (3-31-22)

iii. Indoor inhalation of volatile chemicals via volatilization of chemicals from soil, groundwater, or free phase product; (7-1-25)

iv. Ingestion, inhalation, or dermal exposure to groundwater and/or surface water that has been impacted by contaminants that have leached from the soils; and (7-1-25)

v. Other complete or potentially complete routes of exposure; (3-31-22)

e. Evaluate the potential for exposure to: (3-31-22)

i. Adult and child residential receptors; (3-31-22)

ii. Adult construction and utility workers; (3-31-22)

iii. Aquatic life; (3-31-22)

iv. Recreational receptors; and (3-31-22)

v. Other relevant potentially exposed receptors; (3-31-22)

f. Evaluate the potential for use of impacted groundwater for ingestion based on: (7-1-25)

i. The current and historical use of the groundwater for drinking water or irrigation; (7-1-25)

ii. The location and approved use of existing groundwater wells in a one half (½) mile radius from the contaminated site at the release point; (7-1-25)

iii. The degree of hydraulic connectivity between the impacted groundwater and other groundwater bearing zones or surface water; and (7-1-25)

iv. The location of delineated source water protection areas for public drinking water systems. (3-31-22)

301. -- 399. (RESERVED)

400. ESTABLISHMENT OF REMEDIATION STANDARDS.
If, as a result of the assessment and risk evaluation completed as described in Section 300, it is determined that corrective action is required, remediation standards must be established. The remediation standards established in these rules must be no more stringent than applicable or relevant and appropriate federal and state standards and are consistent with Section 121 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. Section 9621) and Section 39-107D(2), Idaho Code, taking into consideration site-specific conditions. These standards, and any activity use limitations proposed for the site, must be established as part of a CAP approved in writing by the Department. The standards may consist of the following or combinations of the following. (7-1-25)

01. Screening Levels. The petroleum contaminant concentrations in soil, groundwater, and soil vapor in the EPA RSLs Tables. (7-1-25)

02. Risk-Based Levels. Site-specific, media-specific petroleum contaminant concentrations established in accordance with the risk evaluation procedures described in Section 300. (7-1-25)

03. Generic Health Standards. An established state or federal generic numerical health standard that achieves an appropriate health-based level so that any substantial present or probable future risk to human health or the environment is eliminated or reduced to protective levels based upon present and reasonably anticipated future uses of the site. (7-1-25)

401. -- 499. (RESERVED)

500. FACTORS WHEN PRACTICAL QUANTITATION LIMITS ARE GREATER THAN SCREENING LEVELS.
Practical quantitation limits may be greater than screening levels or risk-based concentrations for certain chemicals. In such cases the following factors, or others, may be used in allowing practical quantitation limits as remediation standards. (7-1-25)

01. Analytical Method. The published or expected practical quantitation limit for a specific chemical and method, and the availability of other methods that may enable lower practical quantitation limits to be achieved. (7-1-25)

02. Method Detection Limit. The magnitude of the difference between the stated practical quantitation limit and the method detection limit. (3-31-22)

03. Sampling Procedures. The availability of alternative sampling procedures that may enable lower practical quantitation limits to be achieved. (7-1-25)

04. Estimated Risk Levels. The estimated risk levels when site concentrations are assumed to be at the practical quantitation limit. (3-31-22)

501. -- 599. (RESERVED)

600. ACTIVITY AND USE LIMITATIONS.

01. Purpose. The provisions of the Uniform Environmental Covenants Act (UECA), Chapter 30, Title 55, Idaho Code, may be utilized to create restrictions and obligations regarding activity and use to protect the integrity of a cleanup action and assure the continued protection of human health and the environment. Activity and use limitations may be proposed as elements of a CAP in at least the following circumstances: (7-1-25)

a. Where onsite current or proposed land use is not residential and maximum residual site concentrations are greater than screening levels for residential use; (3-31-22)

b. Where onsite current or proposed land use is not residential and the risk or hazard calculated for residential receptors through an approved risk evaluation is unacceptable; (3-31-22)

c. Where off-site groundwater concentrations exceed residential use screening levels or risk-based concentrations; or (7-1-25)

d. When the Department determines, based upon the proposed CAP, that such activity and use limitations are required to assure the continued protection of human health and the environment or the integrity of the cleanup action. (7-1-25)

02. Documentation of Controls. Activity and use limitations, approved by the Department, must be described in an environmental covenant executed pursuant to the UECA and must be incorporated into a CAP. (7-1-25)

601. -- 699. (RESERVED)

700. GUIDANCE MANUAL.
If any material revisions to the risk evaluation manual for petroleum releases are required, the Department will, through public notice, invite the Board of Trustees established in Section 41-4904, Idaho Code, and members of the public, including the regulated community, to participate in making such revisions. Material revisions are those changes that result in, or could result in, a different interpretation or use of any provision of the guidance manual. (7-1-25)

701. -- 799. (RESERVED)

800. TABLE.
Chemicals of Interest for Various Petroleum Products:

CHEMICALS OF INTEREST FOR VARIOUS PETROLEUM PRODUCTS				
Chemical	**Gasoline/ JP-4/ Avgas**	**Diesel/ Fuel Oil No. 2/ Kerosene**	**Fuel Oil No.4**	**Jet Fuels (Jet A, JP-5, JP-8)**
Benzene	X	X		X
Toluene	X	X		X
Ethyl benzene	X	X		X
Xylenes (mixed)	X	X		X

CHEMICALS OF INTEREST FOR VARIOUS PETROLEUM PRODUCTS				
Chemical	**Gasoline/ JP-4/ Avgas**	**Diesel/ Fuel Oil No. 2/ Kerosene**	**Fuel Oil No.4**	**Jet Fuels (Jet A, JP-5, JP-8)**
1,2 Dibromoethane (EDB)[1]	X			
1,2 Dichloroethane (EDC)[1]	X			
Methyl Tert-Butyl Ether (MTBE)	X			
Acenaphthene[2]		X	X	X
Anthracene[2]		X	X	X
Benzo(a)pyrene[2]		X	X	X
Benzo(b)fluoranthene[2]		X	X	X
Benzo(k)fluoranthene[2]		X	X	X
Benz(a)anthracene		X	X	X
Chrysene[2]		X	X	X
Fluorene[2]		X	X	X
Fluoranthene[2]		X	X	X
Naphthalene	X	X	X	X
Pyrene[2]		X	X	X

[1] Leaded only
[2] Vapor intrusion is not applicable because there is no inhalation toxicity information and/or the chemical is not sufficiently volatile and toxic to pose an inhalation risk from a soil or groundwater source.

(7-1-25)

801. -- 999. (RESERVED)