DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

EPA template 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA725)

Current Human Exposures Under Control

Facility Name: **Cameron Yakima, Inc.**
Facility Address: **1414 S 1ST ST, YAKIMA**
Facility EPA ID #: **WAD009477175**

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

   ✓ If yes - check here and continue with #2 below.

   _____ If no - re-evaluate existing data, or

   _____ if data are not available skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater	✓			Perchloroethylene (PCE)
Air (indoors)[2]		✓		N/A - All structures have been removed
Surface Soil (e.g., <2 ft)		✓		Contaminated soil has been removed and replaced
Surface Water		✓		Shano ditch surface water has been piped across the site
Sediment		✓		N/A - No sediments onsite
Subsurf. Soil (e.g., >2 ft)	✓*			*Contaminated soil above the water table (vadose zone) has been removed and replaced
Air (outdoors)		✓		Contaminated soil removed and replaced

_____ If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.

✓ If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

_____ If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s): Cameron Yakima inc. (CYI) was a RCRA permitted facility within the Yakima Railroad Area (YRRA). See the following link, (http://www.ecy.wa.gov/programs/tcp/sites/yrra/yrra2.html) for more information about the YRRA.

The contaminant of concern at CYI is perchloroethylene (PCE). The Maximum Contaminant Limit (MCL) for PCE under the Safe Drinking Water Act (SDWA) is 5 ppb. One source of contamination at this site was determined to be the RCRA permitted unit named "SURFIMP". This unit was removed under a RCRA interim action. After the RCRA permit application was denied and interim status terminated, CYI declared bankruptcy. The Washington State Department of Ecology's Toxic Cleanup Program initiated sitewide cleanup activities, due to the immediate threat to public health and the environment. All structures and equipment underwent hazardous waste determinations, and were disposed of accordingly. Contaminated soils were removed from the site until contaminants levels were below MTCA cleanup levels or until the water table was encountered, whichever came first. Excavations were filled with clean soil from offsite, thus removing the primary sources of contamination.

The only "surface" water at the site is the Shano Ditch, which was enclosed in a galvanized steel and concrete structure below the property surface as it crossed the CYI site. As part of the site remediation, the Shano Ditch was replaced with a temporary pipe, the original pipe was removed, contamination in the vicinity of the original pipe was addressed, and then the ditch was replaced in it's original location, within a new 36-inch diameter galvanized steel pipe. No soil is in physical contact with surface water.

*Contaminants in surface and vadose zone soils are currently non-detectable. The PCE concentration in groundwater at the site was initially 1,000 ppb, but after source removal the concentration has dropped to approximately 25 ppb. At this time, this may be a background PCE level for the YRRA, of which CYI is one site out of many. It appears that groundwater entering the CYI site has PCE levels ranging from 10 to 20 ppb. Thus, CYI is likely either no longer contributing, or is minimally contributing, to groundwater contamination in the YRRA.

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

[2] Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks

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3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

	Potential **Human Receptors** (Under Current Conditions)						
"Contaminated" Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food[3]
Groundwater	NO	NO	NO	NO	NO	NO	NO
~~Air (indoors)~~							
~~Soil (surface, e.g., <2 ft)~~							
~~Surface Water~~							
~~Sediment~~							
Soil (subsurface e.g., >2 ft)	NO	NO	NO	NO	NO	NO	NO
~~Air (outdoors)~~							

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors' spaces for media that are not "contaminated" as identified in #2 above.
2. Enter "yes" or "no" for potential "completeness" under each "Contaminated" Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have check spaces ("___"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

_✓_ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter "E" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

_____ If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.

_____ If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code

Rationale and Reference(s): The pathway for human exposure to PCE in subsurface soil and groundwater is the potential existence of active drinking water wells in the surface aquifer.

Subsurface soils in the vadose zone were removed from the site until the measured contaminant levels were below MTCA cleanup levels, or until the water table was encountered, whichever came first.

Contamination in groundwater and soils below the vadose zone is being addressed as part of the YRRA cleanup. Following delineation of the contaminated area, Ecology provided the Cities of Yakima and Union Gap grant funding of $6.4 million to provide municipal water to all residences in the area. Door to door surveys and mass mailings announced the availability of free connections to the municipal water supplies. Over 1,200 residences made use of this opportunity. Two property owners rejected the opportunity to connect to the municipal water supply.

The only other remaining known user of the aquifer is the City of Union Gap. The city supply wells are completed to a deeper aquifer, and the connection between the surface aquifer and the deeper aquifer is unclear. Monitoring wells are in place upgradient of the city water supply wells, and are sampled quarterly. A significant amount of funding is being held in reserve in the event that PCE contamination is detected at

[3] Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

the monitoring wells. This funding will be used to treat groundwater and protect the City of Union Gap's supply wells. Additionally, testing is conducted at the supply wells in accordance with Washington Department of Health requirements.

Despite best efforts by Ecology and the PLPs responsible for the site, the potential exists that active wells may exist in the area. Recent GW concentrations of PCE are approximately 20 ppb (MCL = 5 ppb). Ecology has made significant efforts to find all residential supply drinking water wells in the contaminated area, but it cannot be stated with 100% certainty that groundwater is not being used for as a drinking water source.

However, it is judged that the efforts to connect any users to municipal water and to protect the City of Union Gap water supply have been sufficient to reasonably prevent human exposure via groundwater.

4 Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **"significant"**[4] (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?

_____ If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

_____ If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

_____ If unknown (for any complete pathway) - skip to #6 and enter "IN" status code

Rationale and Reference(s):

[4] If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

5 Can the "significant" **exposures** (identified in #4) be shown to be within **acceptable** limits?

_____ If yes (all "significant" exposures have been shown to be within acceptable limits) - continue and enter "YE" after summarizing and referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

_____ If no (there are current exposures that can be reasonably expected to be "unacceptable")- continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.

_____ If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" status code

Rationale and Reference(s):_____
_____
_____
_____
_____
_____
_____

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

✓ YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the **Cameron Yakima, Inc.** facility, EPA ID # **WAD009477175** located at **1414 S 1ST ST, YAKIMA, WA** under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

____ NO - "Current Human Exposures" are NOT "Under Control."

____ IN - More information is needed to make a determination.

Completed by (signature) _____ Date August 29, 2001
(print) Jim Pearson
(title) Hazardous Waste Compliance Assistance Specialist

Supervisor (signature) _____ Date _____
(print) Brian Dick
(title) Section Supervisor
(State) Washington State Department of Ecology

Locations where References may be found:

Yakima Railroad Area website
http://www.ecy.wa.gov/programs/tcp/sites/yrra/yrra2.html

Washington State Department of Ecology, Central Regional Office, Central Files

Contact telephone and e-mail numbers

(name) Jim Pearson
(phone) (509) 457-7142
(e-mail) jpea461@ecy.wa.gov

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name: **Cameron Yakima, Inc.**
Facility Address: **1414 S 1st St, Yakima, WA**
Facility EPA ID #: **WAD009477175**

1. Has **all** available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

   ✓ If yes - check here and continue with #2 below.

   _____ If no - re-evaluate existing data, or

   _____ If data are not available, skip to #8 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the

Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

___✓___ If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

_____ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): Cameron Yakima inc. (CYI) was a RCRA permitted facility within the Yakima Railroad Area (YRRA). See the following link, (http://www.ecy.wa.gov/programs/tcp/sites/yrra/yrra2.html) for more information about the YRRA.

The contaminant of concern at CYI is perchloroethylene (PCE). The Maximum Contaminant Limit (MCL) for PCE under the Safe Drinking Water Act (SDWA) is 5 ppb. The Washington State Department of Ecology's Toxic Cleanup Program conducted site wide cleanup activities at CYI due to the immediate threat to public health and the environment resultant from the onsite soil contamination. Contaminated soils were removed from the site until contaminant levels were below MTCA cleanup levels or until the water table was encountered, whichever came first, thus removing the primary sources of contamination. Excavations were then filled with clean soil from offsite.

Contaminants in surface and vadose zone soils are currently non-detectable. The PCE concentration in groundwater at the site was initially 1,000 ppb, but after source removal the concentration has dropped to approximately 25 ppb. At this time, this may be a background PCE level for the YRRA, of which CYI is one site out of many. It appears that groundwater entering the CYI site has PCE levels ranging from 10 to 20 ppb. Thus, CYI is likely either no longer contributing, or is minimally contributing, to groundwater contamination in the YRRA.

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

   ___✓___ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"[2]).

   _____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

   _____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): Contaminated groundwater location and extent has been defined as part of the YRRA cleanup activities. Ecology's Toxic Cleanup Program, has been working to clean up the entire YRRA. CYI is one facility of many that contributed to contamination in the YRRA. The YRRA is roughly centered about CYI, extending 1 mile north, 1 mile south, 1 mile west, and 1½miles east of the facility. Groundwater and groundwater contamination in the YRRA was monitored quarterly from the fall of 2000 until the fall of 2001. No significant lateral or vertical changes were noted during the quarterly monitoring. The monitoring schedule was then changed to semi-annual monitoring.

Monitoring wells are installed such that any lateral migration of contaminated groundwater will be discovered. In the event that lateral migration occurs, financial mechanisms are in place to address the additional migration, especially if known drinking water sources are threatened.

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does "contaminated" groundwater **discharge** into **surface water** bodies?

_____ If yes - continue after identifying potentially affected surface water bodies.

__✓__ If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): The potentially impacted surface water bodies are the Yakima River, and the Columbia River, which the Yakima River joins approximately 110 miles downstream. Monitoring wells and remediation investigations at sites in the YRRA indicate that the contamination is restricted and does not enter surface water. Monitoring wells surround the YRRA and indicate that contamination is not passing the wells to the Yakima River or any other surface water body. Sampling results are available in the site files in Ecology's Central Regional Office.

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

   _____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgment/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

   _____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration[3] of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

   _____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently acceptable**" (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

_____ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR
2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

_____ If no - (the discharge of "contaminated" groundwater can not be shown to be "**currently acceptable**") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

_____ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s):

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[4] Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

[5] The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

   ___✓___ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

   _____ If no - enter "NO" status code in #8.

   _____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s): Sampling for the Yakima Railroad area is conducted under Memorandum of Agreement, Agreement Number – YRRA1, between Ecology and Farallon Consulting of Issaquah, Washington. The agreement is a valid and binding contract between Ecology and Farallon Consulting which was signed June 1, 2000. The length of the contract is three years. Seventy-two wells are contracted to be sampled; forty-four wells at thirteen facilities within the YRRA, and twenty-eight wells at fourteen locations around the perimeter of the YRRA. Sampling is occurring twice per year for the remainder of the contract.

8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

___✓___ YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Cameron Yakima Inc. facility, EPA ID #WAD009477175, located at 1414 S. 1st St. Yakima, WA Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

_____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

_____ IN - More information is needed to make a determination.

Completed by _____ Date February 7, 2002
Jim Pearson
Hazardous Waste Compliance Assistance Specialist
Hazardous Waste and Toxics Reduction Program
Washington Department of Ecology

Supervisor _____ Date February 7, 2002
Brian Dick
Central Regional Office Section Supervisor
Hazardous Waste and Toxics Reduction Program
Washington Department of Ecology

Locations where references may be found:

http://www.ecy.wa.gov/programs/tcp/sites/yrra/yrra2.html
Washington State Department of Ecology, Central Regional Office, Central Files

Contact telephone and e-mail numbers:

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