

**ENVIRONMENTAL INDICATOR (EI) RCRIS CODE (CA725)**

**Current Human Exposures Under Control**

Facility Name: CASCADE WOOD PRODUCTS INC.  
Facility Address: 8399 14th Street, White City, OR 97503  
Facility EPA ID #: ORD 092894351

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 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).

**Current Human Exposures Under Control**  
**Environmental Indicator (EI) RCRIS Code (CA725)**  
**Page 2**

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be “contaminated”<sup>1</sup> 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)?

<u>“Contaminated” Media</u>	<u>Yes</u>	<u>No</u>	<u>?</u>	<u>Rationale / Key Contaminants</u>
Groundwater	✓			PCP , tetrachlorophenol
Air (indoors)		✓		
Soil (surface, e.g., <2 ft)		✓		
Surface Water		✓		
Sediment		✓		
Soil (subsurface e.g., >2 ft)	✓			PCP , tetrachlorophenol
Air (outdoors)		✓		

- 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):**

The Cascade Facility, which has operated since 1953, manufactures window and door frames, decorative columns, and other wooden accessories for residential and commercial buildings. Results of investigations at Cascade Wood corporation in 1988 found four main areas (Areas 1-4) of pentachlorophenol (PCP) and tetrachlorophenol contamination: the dip tank, the Turncraft dip tank, the oil/water separator and the PCP underground storage tanks. Sampling in 1988 showed soil concentrations ranged from 0.1 to 13,300 mg/kg for PCP and 0.01 to 490 mg/kg for tetrachlorophenol. Sediment samples collected from onsite ditches and downstream at Military Slough in 1988, indicated PCP contamination in sediments on and offsite at concentrations that range from 0.007 to 2.36 mg/kg; tetrachlorophenol contamination range from 0.007 to 0.977 mg/kg. In 1989, Cascade Wood conducted a soil removal of source areas at the site. Soils with PCP concentrations >500 ppm were taken offsite for disposal at the hazardous waste disposal site (ChemWaste) in Arlington. Soils with PCP levels of 20-500 ppm were consolidated onsite near the dip tank area and capped with asphalt at Area 1. A groundwater extraction and treatment system using activated carbon was installed in 1990. Installation of shallow subsurface collection pipes along foundation footings to prevent contaminated water from migrating along preferential pathways, and, installation of cutoff collars on underground utilities to prevent migration along preferential pathways were in place by July 1991.

An Oregon DEQ consent order was signed on February 25, 1999 to continue remedial investigations in groundwater and soil and provide a risk assessment and feasibility study for groundwater if there is a complete exposure pathway. It was concluded that there is not a complete exposure pathway. Two monitoring wells are in place to insure that there is not an exposure pathway to Military Slough. A soil management plan (dated December 19, 2002) was developed to be incorporated into an institutional control to maintain the asphalt cap and institute conditions if there is soil excavation at three other areas.

Oregon DEQ issued a Record of Decision (ROD) dated January 7, 2005. The elements of the ROD include:

- Implement institutional controls to protect future excavation workers from exposure to residual contamination.
- Discontinue operation of the groundwater extraction and treatment system.

- Institutional controls to restrict groundwater usage within the locality of the facility (LOF) and assure that the remedy remains protective for future land use;
- Contingency measures (in the event significant concentrations are found in groundwater monitoring wells).
- Sampling two monitoring wells to insure there is no exposure at Military Slough. (See DEQ Record of Decision/DEQ Recommended Remedial Action for the Cascade Wood Products, Jackson County dated December 15, 2004).

There was consolidation of soil from Areas 2, 3 and 4 with total chlorophenolics from 20 mg/kg to 500 mg/kg into Area 1. Clean backfill was placed into Areas 2, 3 and 4.

Because Area 1 was capped but with soils containing concentrations of PCB above screening levels, the answer to this question is "yes."

An Easement and Equitable Servitude, an institutional control to prohibit activities and exposure to contaminated soils, was recorded with Jackson County March 17, 2005. (See Cascade Wood DEQ ECSI data at <http://www.deq.state.or.us/lq/ECSI/ecsidetail.asp?seqnbr=20>). The Easement contains the following institutional controls must be implemented to ensure that residual contaminants do not present an unacceptable risk to human health or the environment:

- Designation of Areas 1, 2, 3, and 4 as "soil management areas" where, if excavation activities (e.g., building removal, breaching of cap or foundation, excavation) were to take place, the measures outlined in the SMP would be implemented prior to the activity to protect worker health and safety.
- An Easement and Equitable Servitude which incorporates the SMP, identifies Areas 1, 2, 3, and 4 as management areas where the residual cumulative risk associated with PCP, dioxins, and furans may exceed  $1 \times 10^{-6}$ , and requires the site remain in industrial use until additional risk assessment and/or other remedial action demonstrates that unrestricted use of the site will not pose an unacceptable health risk to humans or the environment.

**Footnotes:**

<sup>1</sup>. "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).

<sup>2</sup>. 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.

**Current Human Exposures Under Control**  
**Environmental Indicator (EI) RCRIS Code (CA725)**  
**Page 3**

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)

<b><u>“Contaminated” Media</u></b>	<b><u>Residents</u></b>	<b><u>Workers</u></b>	<b><u>Day-Care</u></b>	<b><u>Construction</u></b>	<b><u>Trespassers</u></b>	<b><u>Recreation</u></b>	<b><u>Food<sup>3</sup></u></b>
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:**

- Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated”) as identified in #2 above.
- 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 “YE” 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):**

Oregon DEQ issued a Record of Decision in January 2005 stating that there is not a complete groundwater pathway to human health and the environment along with an asphalt cap covering PCP-contaminated soils with accompanying institutional controls. (See DEQ Record of Decision/DEQ Recommended Remedial Action for the Cascade Wood Products, Jackson County dated December 15, 2004 and issued January 7, 2005).

For human exposure, onsite workers during their normal duties would not be exposed to the contaminated soils underneath the asphalt pad at Area 1. However, construction workers could possibly disturb the asphalt cap and be exposed. However, with the Easement and Equitable Servitude filed with Jackson County serving as an institutional control on March 17, 2005, such exposure is controlled.

**Footnotes:**

<sup>3</sup>. *Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)*

**Current Human Exposures Under Control**  
**Environmental Indicator (EI) RCRIS Code (CA725)**  
**Page 4**

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4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**<sup>4</sup> (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):**

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**Footnotes:**

<sup>4</sup> *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.*

**Current Human Exposures Under Control**  
**Environmental Indicator (EI) RCRIS Code (CA725)**  
**Page 5**

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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):**

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Current Human Exposures Under Control  
Environmental Indicator (EI) RCRIS Code (CA725)  
Page 6

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 **CASCADE WOOD PRODUCTS, INC.** facility, EPA ID #**ORD 092894351**, located at **8399 14th Street, White City OR 97503** 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:

*Fredrick Moore*

9/30/2010

(Signature)

(Date)

Fredrick Moore

(Print Name)

Hazardous Waste Permit Writer

(Title)

Supervisor:

*Elizabeth Druback*

9/30/2010

(Signature)

(Date)

Elizabeth Druback

(Print Name)

Manager, Eastern Region Hazardous Waste Program

(Title)

Oregon Department of Environmental Quality

(EPA Region or State)

Locations where References may be found:

DEQ - Eugene Office, 165 E. 7th Ave. Suite 100, Eugene, OR 97401

Contact telephone and E-mail numbers:

Norm Read

(Name)

541.687.7348

(Phone Number)

read.norm@deq.state.or.us

(E-Mail)

**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.**

ENVIRONMENTAL INDICATOR (EI) RCRIS CODE (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name: CASCADE WOOD PRODUCTS INC.  
Facility Address: 8399 14th Street, White City, OR 97503  
Facility EPA ID #: ORD 092894351

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).

Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS Code (CA750)  
Page 2

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2. Is **groundwater** known or reasonably suspected to be "**contaminated**"<sup>1</sup> 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):**

The Cascade Facility, which has operated since 1953, manufactures window and door frames, decorative columns, and other wooden accessories for residential and commercial buildings. Results of investigations at Cascade Wood corporation in 1988 found four main areas of PCP and tetrachlorophenol contamination of the Cascade Wood Product's dip tank, the Turncraft dip tank, the oil/water separator and the pentachlorophenol (PCP) underground storage tank. A groundwater extraction and treatment system using activated carbon was installed in 1990.

An Oregon DEQ consent order was signed on February 25, 1999 to continue, in part, further groundwater remediation investigation and analysis.

From the ROD (p. 11), during the groundwater investigation, PCP was found in 1 sample of 9 ppb. Other sampling contained concentrations of PCP ranging from 290 ppb to 810 ppb. These values are above the DEQ screening level for occupational workers for groundwater ingestion of 3.4 ppb. Because of this, the answer to no. 2 is "yes."

**Footnotes:**

<sup>1</sup>. "*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).

Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS Code (CA750)  
Page 3

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3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"<sup>2</sup> 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"<sup>2</sup>).
- If no**, (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"<sup>2</sup>) - 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):**

Remedial investigation work was performed which lead to DEQ issuing a Record of Decision (ROD) dated January 7, 2005. The ROD included the DEQ staff report which summarizes that further groundwater extraction and treatment is not necessary, and, that there is not a complete exposure pathway for groundwater (ROD, p. 13) As a precaution, two monitoring wells insure that contamination does not impact Military Slough, a nearby surface water body. (ROD, p. 13).

Currently the two Military Slough monitoring wells are monitored annually and as of September 2010, there have been no detections. (interview Norman Read, September 23, 2010). If there are future detections, DEQ and Cascade Wood would need to address such detections.

**Footnotes:**

<sup>2</sup> "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.

Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS Code (CA750)  
Page 4

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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):**

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Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS Code (CA750)  
Page 5

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5. Is the discharge of "contaminated" groundwater into surface water likely to be "insignificant" (i.e., the maximum concentration<sup>3</sup> 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 ecosystems 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<sup>3</sup> 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 judgement/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 ecosystem.

**If no** - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: (1) the maximum known or reasonably suspected concentration<sup>3</sup> 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<sup>3</sup> 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):

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**Footnotes:**

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

Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS Code (CA750)  
Page 6

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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 ecosystems that should not be allowed to continue until a final remedy decision can be made and implemented<sup>4</sup>)?

**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 ecosystems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR (2) providing or referencing an interim-assessment,<sup>5</sup> 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 ecosystems, 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 ecosystems.

**If unknown** - skip to 8 and enter “IN” status code.

**Rationale and Reference(s):**

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**Footnotes:**

<sup>4</sup> 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.

<sup>5</sup> 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 ecosystems.

Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS Code (CA750)  
Page 7

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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):**

In a discussion with the Oregon DEQ Cleanup project manager, Norman Read, he confirmed that the two monitoring wells for Military Slough are still present and being monitored annually. Currently, as of September 2010, there have not been any detections (interview, September 23, 2010).

Nearby these two monitoring well is surface water body Pond 1. Data from these wells makes it appear there is no complete exposure pathway to Pond 1 from groundwater (ROD, p. 12)

Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS Code (CA750)  
Page 8

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 **CASCADE WOOD PRODUCTS, INC.** facility, EPA ID #**ORD 092894351**, located at **8399 14th Street, White City, OR 97503**. 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:

Frederick Moore  
(Signature)

9/30/2010  
(Date)

Frederick Moore  
(Print Name)

Hazardous Waste Permit Writer  
(Title)

Supervisor:

Elizabeth Druback  
(Signature)

9/30/2010  
(Date)

Elizabeth Druback  
(Print Name)

Manager, Eastern Region Hazardous Waste Program  
(Title)

Oregon Department of Environmental Quality  
(EPA Region or State)

Locations where References may be found:

DEQ – Eugene Office, 165 E. 7<sup>th</sup> Ave. Suite 100, Eugene, OR 97401  
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Contact telephone and E-mail numbers:

Norm Read  
(Name)

541.687.7348  
(Phone Number)

read.norm@deq.state.or.us  
(E-Mail)