DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION
RCRA Corrective Action
Current Human Exposures Under Control, Environmental Indicator (EI) RCRAInfo Code CA725

Facility Name: **CleanCare Corporation**
Facility Address: **1510 Taylor Way, Tacoma, Washington 98421**
Facility EPA ID No.: **WAD ~~980638512~~** 980738512

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 (SWMUs), Regulated Units (RUs), and Areas of Concern (AOCs)), been **considered** in this EI determination?

   ___X___ If yes, check here and continue with #2 below.

   _____ If no, reevaluate 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 (EIs) 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 EIs 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 RCRAInfo national database only as long as they remain true (i.e., RCRAInfo status codes must be changed when the regulatory authorities become aware of contrary information).

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	X			See below
Air (indoor)[2]		X		
Surface Soil (e.g., <2 feet)			X	
Surface Water		X		
Sediment		X		
Subsurface Soil (e.g., >2 feet)	X			See below
Air (outdoor)		X		

_____ 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.

__X__ 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 CleanCare Corporation is an abandoned interim status TSD facility on four acres in Tacoma's tideflats, adjacent to Commencement Bay and between the Blair and Hylebos waterways. Neighboring properties include the Philip/BEI Tacoma facility to the west, the ProLogis property to the north and east, the Emerald Services facility to the southeast, and the Potter property to the south.

Formerly known as Northwest Processing, Inc., the facility processed used oil into fuel in the mid 1980s. Over the years, more activities were added, including recycling antifreeze and parts washer solvent, blending hazardous waste fuel, and consolidating hazardous wastes generated by

[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) suggests 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.

small quantity generators. Northwest Processing was incorporated into CleanCare Corporation in 1992. Northwest Processing submitted a Part A application to the U.S. Environmental Protection Agency (EPA) in 1990 to establish interim status to store dangerous waste. The company asserted that waste antifreeze designated as a hazardous waste under the toxicity characteristic rules newly adopted by EPA. EPA accepted the application as valid in 1992. As a result, the company was allowed to store dangerous waste at this location. CleanCare submitted a Part B permit application and a series of revisions from 1988 through 1999 to the Washington State Department of Ecology (Ecology). Ecology's review of the application resulted in four notices of deficiency between 1989 and 1999.

In 1992, EPA entered into separate interim status 3008(h) consent orders with Northwest Processing, Inc. and two neighboring facilities, Burlington Environmental (now owned by Philip Services Corporation) and Sol-Pro, Inc. (now owned by Emerald Services, Inc.) to investigate and, if necessary, to clean up their respective sites. Northwest Processing's order required its owner to monitor groundwater and investigate sources of contamination at the facility.

Northwest Processing, Inc. expanded its services to recycle antifreeze and parts-washing solvent. It also became part of the newly formed CleanCare Corporation in 1992. Ecology conducted a series of compliance inspections at the CleanCare facility in 1998 and 1999. During these inspections Ecology found numerous violations of the Dangerous Waste Regulations and several violations of Chapter 90.48 of the Revised Code of Washington (RCW), Washington's water pollution statute. In July 1999, Ecology issued an enforcement order to CleanCare along with two penalties totaling $486,000. CleanCare filed an appeal of this order to the PCHB in September 1999, but withdrew the appeal before the scheduled hearing date.

In November 1999, CleanCare notified Ecology through its legal council of its intent to close the interim status facility. CleanCare ceased operation at 1507 Taylor Way on November 17, 1999, leaving dangerous waste on-site. EPA's Superfund program, at Ecology's request, took over site security in September of 1999, and began removal of wastes left on-site that posed the greatest threat to human health and the environment. EPA removed a total of two million gallons of waste stored in containers and above-ground storage tanks. Nineteen temporary above-ground storage tanks were removed. Four above-ground tanks were demolished, and a limited soil investigation was conducted in three areas before EPA applied 26,000 square feet of asphalt to temporarily cap the site. After completing these removal and stabilization activities, EPA returned responsibility for the site back to Ecology in September 2000.

Ecology has been responsible for oversight of storm water management and site security since that time. Ecology concluded that without a viable owner with resources or assets, there is no effective regulatory pathway to pursue the cleanup of the CleanCare site using corrective action under Chapter 173-303 WAC or Resource Conservation and Recovery Act (RCRA). The appropriate regulatory framework for contaminated sites without viable owners and/or operators is the Model Toxics Control Act (MTCA) and its implementing regulation, Chapter 173-340 WAC. Responsibility for oversight of the facility was transferred from Ecology's Hazardous Waste and Toxics Reduction (HWTR) Program to Ecology's Toxics Cleanup Program (TCP) in October 2001. In December 2002, Ecology denied a dangerous waste management permit to the CleanCare Corporation and terminated interim status for the facility.

Subsurface investigations in and around waste management units at the site by EPA and the Tacoma-Pierce County Health Department (TPCHD) indicate that both soils and groundwater are contaminated with hazardous constituents. These constituents consist of both organic and inorganic contaminants found in solvents and used oil, both managed at CleanCare. However, historical documents and investigations indicate CleanCare was built on property filled in with industrial waste during the 1960s and 1970s. Land use in this area is heavily industrial. In the 1930s, the property and neighboring properties were part of a tidal marshland. Dredge spoil was placed on the properties in the 1940s and early 1950s and a freshwater marsh formed. Prior to the mid-1970s, during the operation of the former Don Oline Landfill, the marsh was filled with heterogeneous mixture of sand, gravel, and various waste materials. Fill materials included demolition debris, lime solvent sludge from operations at Hooker Chemical (renamed Occidental Chemical Corporation), dredge spoils from adjacent waterways, wood waste, and ground-up automobile interiors (known as auto fluff). The lime solvent sludge contained chlorinated solvent compounds and heavy metals. Given this information and the limited data from recent site investigations, it is difficult at this time to ascribe non-petroleum based contamination to CleanCare's waste management activities.

The facility has undergone a site assessment and has been assigned a ranking of two (2). Under MTCA, facilities are assigned a rank from one (1) to five (5). Those sites with a rank of 1 have the highest priority for cleanup due to potential exposure pathways to humans or sensitive environmental receptors. Those sites with a ranking of 5 are deemed to pose little threat to human health and the environment.

The CleanCare facility was built upon a portion of the former Don Oline Landfill. Some neighboring properties are located on the footprint of the former landfill. Soil and groundwater investigations have occurred on the Potter and Philip properties. [Refer to ***Final Comprehensive RI Report, Philip Services Corporation, Tacoma Facility, Tacoma, Washington***, dated January 21, 2005.] Soil and groundwater investigations are on the nearby ProLogis property have, for the most part, determined the extent of the landfill footprint in soil and groundwater. [Refer to ***ProLogis Taylor Way Property, Remedial Investigation***, dated June 2006.] The investigations at CleanCare and ProLogis are overseen by the Department of Ecology's Toxics Cleanup Program (TCP).

Ecology's TCP and HWTR Program recognize that there is an areawide groundwater contamination as a result of the former Don Oline Landfill. HWTR and TCP have agreed to address soil contamination individually on the neighboring properties under separate mechanisms, including permits, agreed orders, or consent decrees. Ecology intends to address the issues concerning areawide groundwater under an agreed order or consent decree with multiple potentially liable parties (PLPs).

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		Yes		No	No
Air (indoors)		No		No		No	No
Soil (surface, e.g., <2 ft)		No		No		No	No
Surface Water		No		No		No	No
Sediment		No		No		No	No
Soil (subsurface e.g., >2 ft)		No		Yes		No	No
Air (outdoors)		No		No		No	No

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors' spaces for Media which 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) have dash 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).

__X__ 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):

Residences: There are no residential areas at the facility, immediately adjacent to the facility, or above the contaminated groundwater.
Workers: There are currently no workers at the facility. If there were workers at the facility, they would not be exposed to contaminated subsurface soils and groundwater unless they have been uncovered.

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

Day care: There are no known day care businesses at the facility or nearby.
Construction: There are no construction or remediation activities currently occurring at the facility. If there were, construction and remediation activities at the facility or nearby may expose workers to contaminants in groundwater and subsurface soils.
Trespassers: The facility is fenced and locked. While there is a chance that trespassers may gain access to the facility by climbing the fence, this institutional control satisfactorily interrupts this pathway.
Recreation: There are no recreation activities at the facility. Recreational use of the nearby waterways is limited, but it has been determined that contaminated groundwater does not reach nearby waterways.
Food: There maybe some subsistence and other fishing or food collection activities in and along the nearby waterways. But it has been determined that contaminated groundwater does not reach nearby waterways.

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)?

__X__ 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): There are no ongoing construction activities at the CleanCare facility. While there are currently no investigation or remedial activities conducted at the facility, any investigation or remedial activities would be conducted under a site safety plan to avoid exposure to contaminated subsurface soils and groundwater.

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

[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.

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 RCRAInfo 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):

__X__ 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 former CleanCare Corporation facility, EPA ID No. WAD 980738512, located at 1510 Taylor Way, Tacoma, Washington under current and reasonably expected conditions. This determination will be reevaluated 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 Kaia Petersen Date 9/21/06
Kaia Petersen
Hydrogeologist

Supervisor K Seiler Date 9/21/06
K Seiler, Supervisor
Hazardous Waste and Toxics Reduction, Southwest Regional Office
Department of Ecology

Locations where references may be found:

Department of Ecology, Southwest Regional Office, Central Files
P O Box 47775, Olympia, Washington 98504-7775, or
300 Desmond Drive, Lacey, Washington 98503

Contact telephone and e-mail numbers

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kpet461@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
RCRA Corrective Action
Migration of Contaminated Groundwater Under Control, RCRAInfo Code CA750

Facility Name: **CleanCare Corporation**
Facility Address: **1510 Taylor Way, Tacoma, Washington 98421**
Facility EPA ID No.: **WAD 98073812**

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 (SWMUs), regulated units (RUs), and areas of concern (AOCs)), been considered in this EI determination?

   __X__ If yes, check here and continue with #2 below.

   _____ If no, reevaluate 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 EIs 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, EIs 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 RCRAInfo national database only as long as they remain true (i.e., RCRAInfo 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?

   __X__ 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 CleanCare Corporation is an abandoned interim status TSD facility on four acres in Tacoma's tideflats, adjacent to Commencement Bay and between the Blair and Hylebos waterways. Neighboring properties include the Philip/BEI Tacoma facility to the west, the ProLogis property to the north and east, the Emerald Services facility to the southeast, and the Potter property to the south.

   Formerly known as Northwest Processing, Inc., the facility processed used oil into fuel in the mid 1980s. Over the years, more activities were added, including recycling antifreeze and parts washer solvent, blending hazardous waste fuel, and consolidating hazardous wastes generated by small quantity generators. Northwest Processing was incorporated into CleanCare Corporation in 1992. Northwest Processing submitted a Part A application to the U.S. Environmental Protection Agency (EPA) in 1990 to establish interim status to store dangerous waste. The company asserted that waste antifreeze designated as a hazardous waste under the toxicity characteristic rules newly adopted by EPA. EPA accepted the application as valid in 1992. As a result, the company was allowed to store dangerous waste at this location. CleanCare submitted a Part B permit application and a series of revisions from 1988 through 1999 to the Washington State Department of Ecology (Ecology). Ecology's review of the application resulted in four notices of deficiency between 1989 and 1999.

   In 1992, EPA entered into separate interim status 3008(h) consent orders with Northwest Processing, Inc. and two neighboring facilities, Burlington Environmental (now owned by Philip Services Corporation) and Sol-Pro, Inc. (now owned by Emerald Services, Inc.) to investigate and, if necessary, to clean up their respective sites. Northwest Processing's order required its owner to monitor groundwater and investigate sources of contamination at the facility.

[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).

Northwest Processing, Inc. expanded its services to recycle antifreeze and parts-washing solvent. It also became part of the newly formed CleanCare Corporation in 1992. Ecology conducted a series of compliance inspections at the CleanCare facility in 1998 and 1999. During these inspections Ecology found numerous violations of the Dangerous Waste Regulations and several violations of Chapter 90.48 of the Revised Code of Washington (RCW), Washington's water pollution statute. In July 1999, Ecology issued an enforcement order to CleanCare along with two penalties totaling $486,000. CleanCare filed an appeal of this order to the PCHB in September 1999, but withdrew the appeal before the scheduled hearing date.

In November 1999, CleanCare notified Ecology through its legal council of its intent to close the interim status facility. CleanCare ceased operation at 1507 Taylor Way on November 17, 1999, leaving dangerous waste on-site. EPA's Superfund program, at Ecology's request, took over site security in September of 1999, and began removal of wastes left on-site that posed the greatest threat to human health and the environment. EPA removed a total of two million gallons of waste stored in containers and above-ground storage tanks. Nineteen temporary above-ground storage tanks were removed. Four above-ground tanks were demolished, and a limited soil investigation was conducted in three areas before EPA applied 26,000 square feet of asphalt to temporarily cap the site. After completing these removal and stabilization activities, EPA returned responsibility for the site back to Ecology in September 2000.

Ecology has been responsible for oversight of storm water management and site security since that time. Ecology concluded that without a viable owner with resources or assets, there is no effective regulatory pathway to pursue the cleanup of the CleanCare site using corrective action under Chapter 173-303 WAC or Resource Conservation and Recovery Act (RCRA). The appropriate regulatory framework for contaminated sites without viable owners and/or operators is the Model Toxics Control Act (MTCA) and its implementing regulation, Chapter 173-340 WAC. Responsibility for oversight of the facility was transferred from Ecology's Hazardous Waste and Toxics Reduction (HWTR) Program to Ecology's Toxics Cleanup Program (TCP) in October 2001. In December 2002, Ecology denied a dangerous waste management permit to the CleanCare Corporation and terminated interim status for the facility.

Subsurface investigations in and around waste management units at the site by EPA and the Tacoma-Pierce County Health Department (TPCHD) indicate that both soils and groundwater are contaminated with hazardous constituents. These constituents consist of both organic and inorganic contaminants found in solvents and used oil, both managed at CleanCare. However, historical documents and investigations indicate CleanCare was built on property filled in with industrial waste during the 1960s and 1970s. Land use in this area is heavily industrial. In the 1930s, the property and neighboring properties were part of a tidal marshland. Dredge spoil was placed on the properties in the 1940s and early 1950s and a freshwater marsh formed. Prior to the mid-1970s, during the operation of the former Don Oline Landfill, the marsh was filled with heterogeneous mixture of sand, gravel, and various waste materials. Fill materials included demolition debris, lime solvent sludge from operations at Hooker Chemical (renamed Occidental Chemical Corporation), dredge spoils from adjacent waterways, wood waste, and ground-up automobile interiors (known as auto fluff). The lime solvent sludge contained chlorinated solvent compounds and heavy metals. Given this information and the limited data from recent site investigations, it is difficult at this time to ascribe non-petroleum based contamination to CleanCare's waste management activities.

The facility has undergone a site assessment and has been assigned a ranking of two (2). Under MTCA, facilities are assigned a rank from one (1) to five (5). Those sites with a rank of 1 have the highest priority for cleanup due to potential exposure pathways to humans or sensitive environmental receptors. Those sites with a ranking of 5 are deemed to pose little threat to human health and the environment.

The CleanCare facility was built upon a portion of the former Don Oline Landfill. Some neighboring properties are located on the footprint of the former landfill. Soil and groundwater investigations have occurred on the Potter and Philip properties. [Refer to ***Final Comprehensive RI Report, Philip Services Corporation, Tacoma Facility, Tacoma, Washington***, dated January 21, 2005.] Soil and groundwater investigations are on the nearby ProLogis property have, for the most part, determined the extent of the landfill footprint in soil and groundwater. [Refer to ***ProLogis Taylor Way Property, Remedial Investigation***, dated June 2006.] The investigations at CleanCare and ProLogis are overseen by the Department of Ecology's Toxics Cleanup Program (TCP).

Ecology's TCP and HWTR Program recognize that there is an areawide groundwater contamination as a result of the former Don Oline Landfill. HWTR and TCP have agreed to address soil contamination individually on the neighboring properties under separate mechanisms, including permits, agreed orders, or consent decrees. Ecology intends to address the issues concerning areawide groundwater under an agreed order or consent decree with multiple potentially liable parties (PLPs).

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)?

__X__ 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"), 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): The CleanCare facility is built on a portion of a former industrial waste landfill, along with Philip's Tacoma facility and nearby properties. The extent of the landfill outside of the CleanCare property, along with soil and groundwater contamination from the landfill, has determined through investigations on neighboring properties.

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[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.

The nature and extent of the landfill footprint has been investigated under an agreed order between the ProLogis property owners and the Department of Ecology's Toxics Cleanup Program (TCP). In 2006, ProLogis submitted a summary of the results of three quarters of groundwater monitoring. Following a review of the monitoring results, Ecology is able to state migration of contaminated groundwater at the CleanCare facility has stabilized (such that contaminated groundwater is expected to remain within an existing area of contaminated groundwater).

TCP and Ecology's Hazardous Waste and Toxics Reduction (HWTR) Program recognize that there is an areawide groundwater contamination as a result of the former Don Oline Landfill. HWTR and TCP have agreed to address soil contamination individually on the neighboring properties under separate mechanisms, including permits, agreed orders, or consent decrees. Ecology intends to address the issues concerning areawide groundwater under an agreed order or consent decree with multiple potentially liable parties (PLPs), so the outer perimeter of contaminated groundwater will be sampled and analyzed in the future to confirm that contaminated groundwater remains in this area and that further migration of contaminated groundwater is not occurring.

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

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

__X__ 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): Soil and groundwater investigations are on the nearby ProLogis property have, for the most part, determined the extent of the landfill footprint in soil and groundwater. In 2006, ProLogis submitted a summary of the results of three quarters of groundwater monitoring. Following a review of the monitoring results, Ecology is able to state migration of contaminated groundwater at the CleanCare facility has stabilized and that contaminated groundwater does not discharge into neighboring surface water bodies. [Refer to ***ProLogis Taylor Way Property, Remedial Investigation***, dated June 2006.]

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

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

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 of <u>each</u> 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):_____

_____

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.

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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.

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 Kaia Petersen Date 9/21/06
Kaia Petersen
Hydrogeologist

Supervisor K Seiler Date 9/21/06
K Seiler, Supervisor
Hazardous Waste and Toxics Reduction, Southwest Regional Office
Department of Ecology

Locations where references may be found:

Department of Ecology, Southwest Regional Office, Central Files
P.O. Box 47775, Olympia, Washington 98504-7775 or
300 Desmond Drive, Lacey, Washington 98503
(360) 407-6300

Contact telephone and e-mail numbers

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_____ 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):_____

_____

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?"

__X__ 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): Ecology's Hazardous Waste and Toxics Reduction (HWTR) Program and Toxics Cleanup Program (TCP) recognize that there is an areawide groundwater contamination as a result of the former Don Oline Landfill. The HWTR Program and TCP have agreed to address soil contamination individually on the neighboring properties under separate mechanisms, including permits, agreed orders, or consent decrees. Ecology intends to address the issues concerning areawide groundwater under an agreed order or consent decree with multiple potentially liable parties (PLPs), so the outer perimeter of contaminated groundwater will be sampled and analyzed in the future to confirm that contaminated groundwater remains in this area and that further migration of contaminated groundwater is not occurring.

8. Check the appropriate RCRAInfo 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).

__X__ 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 former CleanCare Corporation facility, EPA ID No. WAD 980738512, located at 1510 Taylor Way, Tacoma, Washington 98421. 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