

## **Site Inspection Checklist**





**III. ON-SITE DOCUMENTS & RECORDS VERIFIED** (Check all that apply)

1.	<b>O&amp;M Documents</b> <input type="checkbox"/> O&M manual <input type="checkbox"/> As-built drawings <input type="checkbox"/> Maintenance logs Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A
2.	<b>Site-Specific Health and Safety Plan</b> <input type="checkbox"/> Contingency plan/emergency response plan Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input type="checkbox"/> N/A <input type="checkbox"/> N/A
3.	<b>O&amp;M and OSHA Training Records</b> Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input type="checkbox"/> N/A
4.	<b>Permits and Service Agreements</b> <input type="checkbox"/> Air discharge permit <input type="checkbox"/> Effluent discharge <input type="checkbox"/> Waste disposal, POTW <input type="checkbox"/> Other permits _____ Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A
5.	<b>Gas Generation Records</b> Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input type="checkbox"/> N/A
6.	<b>Settlement Monument Records</b> Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input type="checkbox"/> N/A
7.	<b>Groundwater Monitoring Records</b> Remarks <u>Located in Region IX Office</u>	Readily available	Up to date	<input type="checkbox"/> N/A
8.	<b>Leachate Extraction Records</b> Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input type="checkbox"/> N/A
9.	<b>Discharge Compliance Records</b> <input type="checkbox"/> Air <input type="checkbox"/> Water (effluent) Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input type="checkbox"/> N/A <input type="checkbox"/> N/A
10.	<b>Daily Access/Security Logs</b> Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input type="checkbox"/> N/A

**IV. O&M COSTS**



**C. Institutional Controls (ICs)**

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented  Yes No  N/A

Site conditions imply ICs not being fully enforced  Yes No  N/A

Type of monitoring (e.g., self-reporting, drive by) \_\_\_\_\_

Frequency \_\_\_\_\_

Responsible party/agency \_\_\_\_\_

Contact \_\_\_\_\_

Name Title Date Phone no.

Reporting is up-to-date  Yes  No  N/A

Reports are verified by the lead agency  Yes  No  N/A

Specific requirements in deed or decision documents have been met  Yes No  N/A

Violations have been reported  Yes  No  N/A

Other problems or suggestions:  Report attached

ICs were part of the remedy contained in the 2000 ROD Amendment. Del Norte County took steps to implement those controls by lodging a Covenant to Restrict Use of Property on July 31, 2002.

The Covenant, however, does not include both parcels of land which comprise the Site. The July 31, 2002 Covenant was found to apply solely to parcel #120-020-36. The Covenant should be lodged for both parcels #120-020-36 and #110-010-22.

2. **Adequacy** ICs are adequate  ICs are inadequate  N/A

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**D. General**

1. **Vandalism/trespassing**  Location shown on site map No vandalism evident

Remarks \_\_\_\_\_  
\_\_\_\_\_

2. **Land use changes on site**  N/A

Remarks It appears that the land uses of the Site and surrounding area are essentially the same as they were during the Five-Year Review in 2000. The only observed change is the relocation of the sole lessee of County property, the Wild Feline Rescue Society, from the Humane Society building on Washington Boulevard to other non-County property.

3. **Land use changes off site**  N/A

Remarks \_\_\_\_\_  
\_\_\_\_\_

**VI. GENERAL SITE CONDITIONS**

**A. Roads** Applicable  N/A

1. **Roads damaged**  Location shown on site map Roads adequate  N/A

Remarks Access road is gated and in good condition. The road is controlled by Del Norte County.

**B. Other Site Conditions**

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**VII. LANDFILL COVERS**    Applicable   N/A

**A. Landfill Surface**

1.     **Settlement** (Low spots)                     Location shown on site map      Settlement not evident  
Areal extent \_\_\_\_\_                    Depth \_\_\_\_\_  
Remarks \_\_\_\_\_  
\_\_\_\_\_

2.     **Cracks**                                             Location shown on site map      Cracking not evident  
Lengths \_\_\_\_\_                    Widths \_\_\_\_\_                    Depths \_\_\_\_\_  
Remarks \_\_\_\_\_  
\_\_\_\_\_

3.     **Erosion**                                             Location shown on site map      Erosion not evident  
Areal extent \_\_\_\_\_                    Depth \_\_\_\_\_  
Remarks \_\_\_\_\_  
\_\_\_\_\_

4.     **Holes**                                             Location shown on site map      Holes not evident  
Areal extent \_\_\_\_\_                    Depth \_\_\_\_\_  
Remarks \_\_\_\_\_  
\_\_\_\_\_

5.     **Vegetative Cover**                     Grass                     Cover properly established      No signs of stress  
 Trees/Shrubs (indicate size and locations on a diagram)  
Remarks \_\_\_\_\_  
\_\_\_\_\_

6.     **Alternative Cover (armored rock, concrete, etc.)**                     N/A  
Remarks \_\_\_\_\_  
\_\_\_\_\_

7.     **Bulges**                                             Location shown on site map      Bulges not evident  
Areal extent \_\_\_\_\_                    Height \_\_\_\_\_  
Remarks \_\_\_\_\_  
\_\_\_\_\_

8.     **Wet Areas/Water Damage**                     Wet areas/water damage not evident  
 Wet areas                                             Location shown on site map     Areal extent \_\_\_\_\_  
 Ponding                                             Location shown on site map     Areal extent \_\_\_\_\_  
 Seeps                                                  Location shown on site map     Areal extent \_\_\_\_\_  
 Soft subgrade                                     Location shown on site map     Areal extent \_\_\_\_\_  
Remarks \_\_\_\_\_  
\_\_\_\_\_

9.	<b>Slope Instability</b>	<input type="checkbox"/> Slides <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of slope instability	
	Areal extent _____		
	Remarks _____		
<b>B. Benches</b> <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)			
1.	<b>Flows Bypass Bench</b>	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay	
	Remarks _____		
2.	<b>Bench Breached</b>	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay	
	Remarks _____		
3.	<b>Bench Overtopped</b>	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay	
	Remarks _____		
<b>C. Letdown Channels</b> <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)			
1.	<b>Settlement</b>	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of settlement	
	Areal extent _____                    Depth _____		
	Remarks _____		
2.	<b>Material Degradation</b>	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of degradation	
	Material type _____                    Areal extent _____		
	Remarks _____		
3.	<b>Erosion</b>	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of erosion	
	Areal extent _____                    Depth _____		
	Remarks _____		
4.	<b>Undercutting</b>	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of undercutting	
	Areal extent _____                    Depth _____		
	Remarks _____		
5.	<b>Obstructions</b> Type _____	<input type="checkbox"/> No obstructions	
	<input type="checkbox"/> Location shown on site map                    Areal extent _____		
	Size _____		
	Remarks _____		

6.	<b>Excessive Vegetative Growth</b> <input type="checkbox"/> No evidence of excessive growth <input type="checkbox"/> Vegetation in channels does not obstruct flow <input type="checkbox"/> Location shown on site map Remarks _____ _____	Type _____	Areal extent _____
<b>D. Cover Penetrations</b> <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	<b>Gas Vents</b> <input type="checkbox"/> Active <input type="checkbox"/> Passive <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____		
2.	<b>Gas Monitoring Probes</b> <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____		
3.	<b>Monitoring Wells</b> (within surface area of landfill) <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____		
4.	<b>Leachate Extraction Wells</b> <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____		
5.	<b>Settlement Monuments</b> <input type="checkbox"/> Located <input type="checkbox"/> Routinely surveyed <input type="checkbox"/> N/A Remarks _____ _____		

<b>E. Gas Collection and Treatment</b> <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	<b>Gas Treatment Facilities</b>	<input type="checkbox"/> Thermal destruction <input type="checkbox"/> Collection for reuse	
	<input type="checkbox"/> Flaring <input type="checkbox"/> Good condition	<input type="checkbox"/> Needs Maintenance	
Remarks _____ _____			
2.	<b>Gas Collection Wells, Manifolds and Piping</b>	<input type="checkbox"/> Needs Maintenance	
	<input type="checkbox"/> Good condition		
Remarks _____ _____			
3.	<b>Gas Monitoring Facilities</b> ( <i>e.g.</i> , gas monitoring of adjacent homes or buildings)	<input type="checkbox"/> N/A	
	<input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance		
Remarks _____ _____			
<b>F. Cover Drainage Layer</b> <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	<b>Outlet Pipes Inspected</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
Remarks _____ _____			
2.	<b>Outlet Rock Inspected</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
Remarks _____ _____			
<b>G. Detention/Sedimentation Ponds</b> <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	<b>Siltation</b>	Areal extent _____	Depth _____ <input type="checkbox"/> N/A
	<input type="checkbox"/> Siltation not evident		
Remarks _____ _____			
2.	<b>Erosion</b>	Areal extent _____	Depth _____
	<input type="checkbox"/> Erosion not evident		
Remarks _____ _____			
3.	<b>Outlet Works</b>	<input type="checkbox"/> Functioning <input type="checkbox"/> N/A	
Remarks _____ _____			
4.	<b>Dam</b>	<input type="checkbox"/> Functioning <input type="checkbox"/> N/A	
Remarks _____ _____			

<b>H. Retaining Walls</b>		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	<b>Deformations</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Deformation not evident
	Horizontal displacement _____	Vertical displacement _____	
	Rotational displacement _____		
	Remarks _____		
	_____		
2.	<b>Degradation</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Degradation not evident
	Remarks _____		
	_____		
<b>I. Perimeter Ditches/Off-Site Discharge</b>		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	<b>Siltation</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Siltation not evident
	Areal extent _____	Depth _____	
	Remarks _____		
	_____		
2.	<b>Vegetative Growth</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A
	<input type="checkbox"/> Vegetation does not impede flow		
	Areal extent _____	Type _____	
	Remarks _____		
	_____		
3.	<b>Erosion</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Erosion not evident
	Areal extent _____	Depth _____	
	Remarks _____		
	_____		
4.	<b>Discharge Structure</b>	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
	Remarks _____		
	_____		
<b>VIII. VERTICAL BARRIER WALLS</b>		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	<b>Settlement</b>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Settlement not evident
	Areal extent _____	Depth _____	
	Remarks _____		
	_____		
2.	<b>Performance Monitoring</b>	Type of monitoring _____	
	<input type="checkbox"/> Performance not monitored		
	Frequency _____	<input type="checkbox"/> Evidence of breaching	
	Head differential _____		
	Remarks _____		
	_____		

<b>IX. GROUNDWATER/SURFACE WATER REMEDIES</b>		Applicable <input type="checkbox"/> N/A <input type="checkbox"/>
<b>A. Groundwater Extraction Wells, Pumps, and Pipelines</b>		<input type="checkbox"/> Applicable <input type="checkbox"/> N/A
1.	<b>Pumps, Wellhead Plumbing, and Electrical</b> <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells properly operating <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____	
2.	<b>Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances</b> <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____	
3.	<b>Spare Parts and Equipment</b> <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks _____ _____	
<b>B. Surface Water Collection Structures, Pumps, and Pipelines</b>		<input type="checkbox"/> Applicable <input type="checkbox"/> N/A
1.	<b>Collection Structures, Pumps, and Electrical</b> <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____	
2.	<b>Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances</b> <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____	
3.	<b>Spare Parts and Equipment</b> <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks _____ _____	



**E. Monitored Natural Attenuation**

1. **Monitoring Wells** (natural attenuation remedy)  
Properly secured/locked    Functioning    Routinely sampled    Good condition  
All required wells located    Needs Maintenance     N/A  
The monitoring wells appeared to be in good condition and are sufficiently secured. However corrosion of the metal outer casing of the PVC well has allowed water to accumulate and may compromise the security of the well if corrosion continues. Del Norte County officials will conduct necessary maintenance

**X. OTHER REMEDIES**

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

**XI. OVERALL OBSERVATIONS**

**A. Implementation of the Remedy**

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).  
The remedy was designed to reduce the level of 1,2-DCP in the groundwater plume. Groundwater samples from the Site showed that by the end of 1994 the decrease in 1,2-DCP concentrations resulting from treatment of the groundwater had leveled off. Enhancements in the system were tried with no significant results. Treatment system shutdown also yielded no significant differences in contaminant concentrations. A TI waiver was issued for the 1,2-DCP MCL. The ROD Amendment included containment, a TI waiver, institutional controls and monitoring.

**B. Adequacy of O&M**

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.  
O&M of the treatment system is not an issue because the system has been turned off since October 1997. Routine monitoring is occurring at four wells. As described above, some maintenance is needed at these wells. Another Five-Year Review will be required because contaminant levels in the groundwater are still above health based levels.

**C. Early Indicators of Potential Remedy Problems**

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

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**D. Opportunities for Optimization**

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.  
Active treatment systems - both Pump & Treat and Groundwater Sparging - have been employed at this site. These treatment systems had reached their effective limits and were turned off. The effectiveness of the monitored attenuation in containing and shrinking the plume make it unlikely that active treatment will be needed in the future. Groundwater monitoring performed by Del Norte County appears to be sufficient.

## **Site Inspection Team Roster**

- Yvonne Fong, EPA RPM
- Kevin Mayer, EPA RPM
- Kim Muratore, EPA Case Developer
- Cameron McDonald, EPA CIC
- Leon Perreault, Del Norte County Department of Health and Social Services
- James Buckles, Del Norte County Department of Agriculture
- Dave Cavyell, Del Norte County Department of Agriculture
- Ernie Perry, Del Norte County Department of Planning

## **Interview Documentation Form**

### INTERVIEW DOCUMENTATION FORM

The following is a list of individuals interviewed for this five-year review. See the attached contact records for a detailed summary of the interviews.

Leon Perreault	Lead Environmental Scientist	County of Del Norte, Department of Health and Social Services	06/13/2005
Name	Title/Position	Organization	Date
Jim Buckles	Weights, Measures, Agricultural Inspection	County of Del Norte, Department of Agriculture	06/20/2005
Name	Title/Position	Organization	Date
Dave Cavyell	Agricultural Aide	County of Del Norte, Department of Agriculture	06/20/2005
Name	Title/Position	Organization	Date
Ernie Perry	Director, Community Development Department	County of Del Norte Community Development Department	06/21/2005
Name	Title/Position	Organization	Date

## INTERVIEW RECORD

<b>Site Name:</b> Del Norte Pesticide Storage Area		<b>EPA ID No.:</b> CAD000626176	
<b>Subject:</b> Five-Year Review for Del Norte Pesticide Storage Area		<b>Time:</b> 1:00 pm	<b>Date:</b> 06/13/2005
<b>Type:</b> Telephone            Visit            Other <b>Location of Visit:</b> County of Del Norte, Department of Health and Social Services, 880 Northcrest Drive, Crescent City, CA 95531		<b>Incoming</b> <b>Outgoing</b>	
<b>Contact Made By:</b>			
<b>Name:</b> Yvonne Fong Kevin Mayer Cameron McDonald		<b>Title:</b> Remedial Project Manager Remedial Project Manager Community Involvement Coordinator	
<b>Organization:</b> US EPA Region IX			
<b>Individual Contacted:</b>			
<b>Name:</b> Leon Perreault		<b>Title:</b> Lead Environmental Scientist	
<b>Organization:</b> County of Del Norte, Department of Health and Social Services			
<b>Telephone No:</b> (707) 464-3191 x 341		<b>Street Address:</b> 880 Northcrest Drive	
<b>Fax No:</b> (707) 465-1783		<b>City, State, Zip:</b> Crescent City, CA	
<b>E-Mail Address:</b>		95531	
<b>Summary Of Conversation</b>			
<p>On June 13, 2005, Yvonne Fong, Kevin Mayer, and Cameron McDonald interviewed Mr. Leon Perreault, Lead Environmental Scientist of the County of Del Norte's Department of Health and Social Services at his office located at 880 Northcrest Drive, Crescent City, CA 95531. The in-office interview was followed by further information gathering and discussion with Mr. Perreault at the Site located at 2650 Washington Boulevard, Crescent City, CA 95531. The interview focused on the institutional controls (ICs) contained in the remedy relating to groundwater use and groundwater well installation/operation.</p> <p>The Department of Health and Social Services is responsible for issuing well permits. Health and Social Services programs were not well established prior to 1990 and County records relating to wells only date back to 1993. Mr. Perreault outlined the process for obtaining new well permits as follows: an application for construction is submitted to the Planning Department where it undergoes environmental review; the application goes before the Planning Commission and the Board of Supervisors for approval; if approved, the Community Development Department will issue a building permit and the Department of Health and Social Services will issue a well permit. The County has improved code enforcement of well construction standards.</p> <p>Wells in Del Norte County are commonly 40-60 feet deep. Some older hand-dug wells are still in use. Mr. Perreault indicated that the area surrounding the Del Norte Pesticide Storage Area site is currently in a drought cycle and a number of nearby wells have run dry. Wells are closed by a certified C57 well driller. New wells to replace dry wells are generally allowed once a building permit to provide electricity to the new well is secured and the County has evidence that the well is adequately separated from septic systems.</p>			

## Summary Of Conversation

(Leon Perreault 06/13/2005)

There are four remaining monitoring wells and two pumping wells on the Del Norte Pesticide Storage Area site. Around the Site, one new well has been located on Napa Street and another on West Jefferson Street. Replacement wells have also been installed; one on Riverside Drive and one on West Jefferson Street at Napa Street. These new and replacement wells are beyond the quarter (1/4) mile radius around the Site where wells of any type are prohibited under the ICs. No wells in the area provide water to more than one single family residence as prohibited by the ICs. Additionally, the new and replacement wells are generally up-gradient from the Site, further minimizing the potential to spread contaminated groundwater.

The Del Norte County Department of Health and Social Services' emphasis on maintaining separation between water supplies and septic systems is one major factor in ensuring the effectiveness of the IC prohibiting wells within a quarter mile. Most of the land within a quarter mile of the Site is Del Norte County land and is either served by municipal water lines or undeveloped. The remaining land within this radius is currently farmland to the south of the Site. Mr. Perreault noted that subsurface conditions at this farmland include both unreliable groundwater and a high water table with seasonally marshy conditions. The practical considerations for septic system separation on this land would necessitate municipal water and sewage services for any further development. Mr. Perreault had no indication that any development of the farmland was anticipated.

The marshy conditions and shallow groundwater have necessitated the use of municipal water on County property in the area. The Del Norte County Department of Agriculture's Office and Animal Quarantine Facility are located at the Site. The Del Norte County Airport is adjacent to the Site. Both the Department of Agriculture and Airport rely on municipal water. The Department of Health and Social Services is generally moving away from the permitting and use of private wells and is advocating the use of municipal water.

The ICs also prohibit wells supplying multiple family residences within one mile of the Site. During the last five years the only multi-family construction within one mile of the Site is at the Seawood Apartments at 1403 Inyo Street and Washington Boulevard. This apartment complex relies on municipal water and sewage, and no well permit has been issued. As with the single family residences, practical considerations and evolving County policy add to the reliability of the protectiveness of the ICs.

## INTERVIEW RECORD

<b>Site Name:</b> Del Norte Pesticide Storage Area		<b>EPA ID No.:</b> CAD000626176
<b>Subject:</b> Five-Year Review for Del Norte Pesticide Storage Area		<b>Time:</b> 5:00 pm <b>Date:</b> 06/20/2005
<b>Type:</b> Telephone      Visit      Other <b>Location of Visit:</b> County of Del Norte, Department of Agriculture, 2650 Washington Blvd., Crescent City, CA 95531		Incoming      Outgoing
<b>Contact Made By:</b>		
<b>Name:</b> Kim Muratore	<b>Title:</b> Case Developer	<b>Organization:</b> US EPA Region IX
<b>Individual Contacted:</b>		
<b>Name:</b> Jim Buckles	<b>Title:</b> Weights, Measures, Agricultural Inspection	<b>Organization:</b> County of Del Norte, Department of Agriculture
<b>Telephone No.:</b> (707) 464-7235 <b>Fax No.:</b> <b>E-Mail Address:</b>		<b>Street Address:</b> 2650 Washington Blvd. <b>City, State, Zip:</b> Crescent City, CA 95531
<b>Summary Of Conversation</b>		
<p>Mr. Buckles verified that other than the County Department of Agriculture offices that have been located at 2650 Washington Blvd. for years (a sign out front indicates that the offices include the Agricultural Commission, Sealer of Weights &amp; Measures, and the County Poundmaster/dog pound) that there are no other County offices on the (20-acre Jack McNamara EPA Parcel) Site property, identified as Assessor Parcels #110-010-22 and #120-020-36, and no lessees. The Feline Rescue Society (aka the Humane Society) has relocated off of the Site property. I verified this through a drive-by of the old premises which appear to be in disrepair and are no longer being used by anyone. I drove around the Site property boundary, to the extent that the roadways permitted.</p> <p>Mr. Buckles was also able to verify that there are no plans for development of the Site property except a possible County airport expansion. Offsite, the only recent change is that Ms. McNamara, the elderly owner of the McNamara Ranch located across from the County offices on the other side of Washington Blvd., died about a year ago. (This property appears to lie within one half mile of the Site property, and therefore is affected by the terms of the 2002 Consent Decree pertaining to well installation and water production and use).</p>		

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<b>Type:</b> Telephone      Visit      Other <b>Location of Visit:</b> County of Del Norte, Department of Agriculture, 2650 Washington Blvd., Crescent City, CA 95531		Incoming      Outgoing	
<b>Contact Made By:</b>			
<b>Name:</b> Kim Muratore	<b>Title:</b> Case Developer	<b>Organization:</b> US EPA Region IX	
<b>Individual Contacted:</b>			
<b>Name:</b> Dave Cavyell	<b>Title:</b> Agricultural Aide	<b>Organization:</b> County of Del Norte, Department of Agriculture	
<b>Telephone No:</b> (707) 464-7235 <b>Fax No:</b> (707) 464-7231 <b>E-Mail Address:</b>		<b>Street Address:</b> 2650 Washington Blvd. <b>City, State, Zip:</b> Crescent City, CA 95531	
<b>Summary Of Conversation</b>			
<p>Mr. Cavyell's daughter has an informal arrangement with the County in which she provides night-time security for the County Agricultural offices at the 2650 Washington Blvd. location in exchange for residential use of an on-site trailer. Mr. Cavyell said that the trailer utilized a public water supply, rather than well water. In a subsequent interview with Community Development Director Ernie Perry, Mr. Perry verified that the trailer was hooked up to the public water supply that serviced the airport.</p>			

## INTERVIEW RECORD

<b>Site Name:</b> Del Norte Pesticide Storage Area		<b>EPA ID No.:</b> CAD000626176	
<b>Subject:</b> Five-Year Review for Del Norte Pesticide Storage Area		<b>Time:</b> 10:30 am	<b>Date:</b> 06/21/2005
<b>Type:</b> Telephone            Visit            Other <b>Location of Visit:</b> County of Del Norte, Community Development Department, 981 H Street, Crescent City, CA 95531		Incoming            Outgoing	
<b>Contact Made By:</b>			
<b>Name:</b> Kim Muratore	<b>Title:</b> Case Developer	<b>Organization:</b> US EPA Region IX	
<b>Individual Contacted:</b>			
<b>Name:</b> Ernie Perry	<b>Title:</b> Director, Community Development Department	<b>Organization:</b> County of Del Norte, Community Development Department	
<b>Telephone No:</b> (707) 464-7254 <b>Fax No:</b> (707) 465-0340 <b>E-Mail Address:</b> EPerry@co.del-norte.ca.us		<b>Street Address:</b> 981 H Street, Suite 110 <b>City, State, Zip:</b> Crescent City, CA 95531	

### Summary Of Conversation

I opened the interview with a short explanation as to the purpose of EPA's Five-Year Review process (according to Site file notes, Mr. Perry had been interviewed for the previous Five-Year Review conducted in 2000 so this should have been familiar to him). I also provided him with a copy of the recorded restrictive Covenant since his office did not have one. Mr. Perry verified that the trailer located at the County Agricultural offices on Washington Blvd. utilized the same public water supply source as the airport, and that there were no plans for development of the Site property other than a possible airport expansion that would necessitate the condemnation of several residences along Riverside Street. Mr. Perry said that it was the County's intention that any commercial or industrial uses of the property at the airport be limited to airport-related activities. Mr. Perry was surprised when I informed him that my check into the General Plan and Zoning Maps for the Site property showed that a portion of the Site property was zoned for manufacturing and industrial uses (the remaining portion of the Site is zoned for resource conservation [basically open space]); he was under the impression that any portion of the Site property that was not zoned as resource conservation was zoned purely for airport use. When I noted that the County Department of Agriculture offices were located on-site, he said that these uses had been "grandfathered in" but the County's intention was to relocate the Department of Agriculture offices off-site and utilize the area around the airport purely for aviation purposes.

Mr. Perry was also surprised to learn that a check I made into the permitted uses under the manufacturing and industrial zoning designation does not preclude the use of the Site property for a daycare or a school, subject to obtaining a use permit (although it does preclude a residential or hospital usage). Although there are no written procedures in place for monitoring and enforcing the terms of the deed restriction and CD which include a restriction against the use of the Site property for a daycare or school, Mr. Perry felt confident that a use permit would not be granted by the County, since it is the County's intention to remove the existing Department of Agriculture offices and use the area around the airport, including the Site property, solely for airport-related purposes. Mr. Perry indicated that the County's Planning Department was small and staff were knowledgeable

### **Summary Of Conversation**

(Ernie Perry 06/21/2005)

about the Site as it was in the area of the planned airport expansion. Mr. Perry said that since the County-owned Site parcel was carved out from the rest of the surrounding County airport parcels under different assessor parcel numbers, that alone would suffice as a reminder to staff that there was something unique about the property and would cause them to look into any proposed new use of the property.

With regard to the recorded deed restriction, after showing Mr. Perry the recorded deed restriction, I discussed my concern with him that it appeared that the restriction had been recorded against only one parcel of the subject property (Parcel #120-020-36) and not Parcel #110-010-22. Mr. Perry said that the intention was to record the deed restriction against the whole McNamara parcel (both Parcels #110-010-22 and #120-020-36) and that he agreed that it appeared that the restriction was mistakenly recorded against only one parcel. Mr. Perry suggested that EPA work with County Counsel Bob Black to resolve the matter.

There are no formal tracking systems or websites for monitoring and enforcing ICs. Mr. Perry said that a combination of being a small County where there is widespread knowledge of special areas like the Superfund site, a close working relationship between staff of different offices, an airport master plan that specifies that the County property in that area only be used for airport related uses, and the ongoing push by the County to get folks off of well water and onto municipal water, would serve to ensure that the terms of the CD and deed restriction were carried out.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9  
75 Hawthorne Street  
San Francisco CA 94105-3901**

**Memorandum**

DATE: 26 August 2005

FROM: Ned Black, Ph.D.  
Regional CERCLA Ecologist/Microbiologist, SFD-8-4

TO: Kevin Mayer, PE, Remedial Project Manager, SFD-7-2

SUBJECT: Evaluation of ecological risk for the five year review of Del Norte Pesticide Storage (CAD000626176), Crescent City, CA

The remedy under five year review for this site is adequately protective of the environment. After a preliminary review of the information for this site, I identified two possible exposure routes by which residual contamination might reach ecological receptors. These were exposure to chromium in site soils and exposure to chlorinated pesticides in surface water expressions of the contaminated ground water plume. However, 1989 Explanation of Significant Difference for the Remedial Action at the Del Norte Pesticide Site determined that the soil chromium is attributable to background geology and so requires no risk management. With regard to the contaminants in ground water, the ground water monitoring program has demonstrated the contaminant plume is shrinking and all surface water expressions of ground water in the area near the site are upgradient of the contaminant plume. As such, it is clear there are no complete exposure pathways to ecological receptors.

The details of this evaluation are as follows:

**Del Norte Pesticide Storage**

**EPA ID#** CAD000626176                      **Location:** Crescent City, CA, Del Norte County

**ROD date:** 9/85 ROD, 4/00 ROD Amendment

**5 yr review date:** 2005/4

**Was there an ERA?**

Yes, environmental impacts were discussed in Risk Assessment

**Were habitat types/eco-receptors looked at?**

Yes

**What contaminants present at the surface?**

groundwater - 1,2-Dichloropropane (1,2-DCP), 2,4-dichlorophenoxyacetic acid (2,4-D)  
soil - chromium

**Were complete exposure pathways considered?**

Yes

**Is a Section 7 (ESA) consultation letter or documentation of informal Section 7 consultation on file?**

Uncertain.

**Is there an evaluation of the presence of endangered species on file?**

Yes

**Can the statement that the remedy is “protective of the environment” be supported?**

Yes

**List of eco-relevant documents (Itx #s):**

06-24-1985 Draft preliminary risk assessment - revised w/TL to Dave 6/24/85	0519-00476
06-15-1987 Draft Environmental Assessment	0519-00191

**List of documents looked at (Itx #s):**

06-24-1985 Draft preliminary risk assessment - revised w/TL to Dave 6/24/85	0519-00476
09-30-1985 51 Record of decision (ROD) for RA, w/marginalia & TL to J Ayres fr H Seraydarian 9/27/85	0519-01805
09-13-1985 Remedial investigation (RI) - final report w/TLs	0519-00438
06-24-1985 Draft preliminary risk assessment - revised w/TL to Dave 6/24/85	0519-00476
06-15-1987 Draft Environmental Assessment	0519-00191
09-21-1989 ESD for the Remedial Action	0519-01512
01-01-2000 Five year review	131091
04-2000 Amendment #1 ROD	0519-01756

**Comments:**

The site, located outside Crescent City immediately south of an airport, is less than one acre in size in a rural area. It is contaminated with herbicides, pesticides, and other compounds. Del Norte County owns the pesticide storage facility and the surrounding land, about 480 acres that extends to the ocean 3/4 of a mile away. The nearest body of water is a small pond 600 ft to the southeast of the site.

The ROD selected soil excavation and pumping and treatment of groundwater. In 1997 the pump and treat system was determined to not be making a significant impact on contaminated groundwater, and was discontinued. In 1989 it was discovered that chromium occurred naturally in site soils and therefore did not need remediation. The 2000 ROD Amendment granted a technical impracticability waiver of the cleanup goal for 1,2-DCP.

Groundwater and soil are the only media likely to be of concern for ecological receptors. The risk assessment estimated that the potential toxicity at the nearby pond from migrating groundwater did not exceed aquatic toxicity benchmarks. Contaminated groundwater releases into the ocean were considered insignificant due to the dilution potential of the ocean. The soils on the site are a complete exposure pathway, but high concentrations of contaminants are found only on a small area. The potential for exposure and bio-concentration up the food chain were not considered significant at this site, but HQs were not calculated.

An environmental assessment was conducted, in accordance with the California Coastal Commission requirements, to determine the possible effects of the remedial action on neighboring wetlands. No endangered species are expected to use the site. The Marhoffer Creek Wetlands area, identified as a “major” wetland in Del Norte County, lies south of the study area.

**The surface contaminants probably do not pose a threat to ecological receptors at this site, although hazard quotients were not calculated for the soil exposure pathway.**