CHPRC ADMINISTRATIVE DOCUMENT PROCESSING AND APPROVAL

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RESPONSIBLE CONTACTS

	Name	Phone Number
Author:	Cathel, Robert L.	373-9171
Manager:	Cherry, Mark J.	372-2200

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REVIEWERS **Others**

Name *(print)*	Organization
Oldham, Rick W	ENVIRONMENTAL PROTECTION
Kaas, Jadie	QUALITY SYSTEMS
Ruck, Fred A III	ENVIRONMENTAL PROTECTION
Hildebrand, R. Doug	DOE

APPROVAL SIGNATURES

Author:			RELEASE / ISSUE
Name: (Print)	Cathel, Robert L.	Date 4/8/14	
Responsible Manager:			
Name: (print)	Cherry, Mark J	Date 4-8-14	
Other:			
Name: (print)		Date	Not Released into DMCS geb 4-10-14

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Cathel, Bob L
(Print and Sign)

Responsible Manager
Cherry, Mark J
(Print and Sign)

Approval by Direct Report to President (Speech/Articles Only) ____
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I. Reviewers	Yes	Print	Signature	Public Y/N (If N, complete J)
General Counsel	[x]	Hatcher, Mel N	per email 04/08/14 BL	(Y) / N
Office of External Affairs	[ ]			Y / N
DOE	[x]	Hildebrand, R Doug	per email 04/10/14 BL	(Y) / N
Other	[x]	Oldham, Rick W	per email 04/08/14 BL	(Y) / N
Other	[x]	Kaas, Jadie L	per email 04/10/14 BL	(Y) / N
Other	[x]	Ruck, Fred A	per email 04/08/14 BL	(Y) / N

J. Comments

Information Clearance Approval

APPROVED
By GE Bratton at 10:10 am, Apr 10, 2014

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A-6001-401 (REV 5)

Dodge, Bonnie J

From: Cathel, Robert L
Sent: Tuesday, April 08, 2014 9:12 AM
To: Dodge, Bonnie J
Subject: RE: HNF-56398 Rev 1.docx

Bonnie,

I approve these changes. Thanks.

Bob

From: Dodge, Bonnie J
Sent: Tuesday, April 08, 2014 9:10 AM
To: Cathel, Robert L
Subject: HNF-56398 Rev 1.docx

Approve changes. You can use this native file as you wish, I will start the clearance process.

B

Dodge, Bonnie J

From: Oldham, Richard W
Sent: Tuesday, April 08, 2014 9:38 AM
To: Dodge, Bonnie J
Subject: Approve: Approval - HNF-56398 Revision 1

Dodge, Bonnie J

From: Kaas, Jadie L
Sent: Thursday, April 10, 2014 7:59 AM
To: Dodge, Bonnie J
Subject: Approve: Approval - HNF-56398 Revision 1

Dodge, Bonnie J

From: Ruck, Fred A III
Sent: Tuesday, April 08, 2014 9:46 AM
To: Dodge, Bonnie J
Subject: Approve: Approval - HNF-56398 Revision 1

Dodge, Bonnie J

From: Hildebrand, R D (Doug)
Sent: Thursday, April 10, 2014 7:19 AM
To: Dodge, Bonnie J; Kaas, Jadie L
Subject: RE: Approval - HNF-56398 Revision 1

I approve this document.

Doug Hildebrand

From: Dodge, Bonnie J
Sent: Thursday, April 10, 2014 6:55 AM
To: Hildebrand, R D (Doug); Kaas, Jadie L
Subject: FW: Approval - HNF-56398 Revision 1
Importance: High

I need this approval please. Doug, if you don't want to approve this document, please send me an email back.

As always, thank you in advance

Bonnie Dodge
Soil & Groundwater Remediation Project

(509)373-4284 office
(509)713-0053 cell
Bonnie_J_Dodge@rl.gov

We shall never know all the good that a simple smile can do. Mother Teresa

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From: Dodge, Bonnie J
Sent: Tuesday, April 08, 2014 9:31 AM
To: Cherry, Mark J; Hatcher, Melvin N; Hildebrand, R D (Doug); Oldham, Richard W; Kaas, Jadie L; Ruck, Fred A III
Cc: Cathel, Robert L
Subject: Approval - HNF-56398 Revision 1

Please approve via voting buttons. Any questions, please contact Bob Cathel directly.

As always, thank you in advance

Bonnie Dodge

Soil & Groundwater Remediation Project

(509)373-4284 office
(509)713-0053 cell
Bonnie_J_Dodge@rl.gov

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Dodge, Bonnie J

From: Hatcher, Melvin N
Sent: Tuesday, April 08, 2014 9:52 AM
To: Dodge, Bonnie J
Subject: Approve: Approval - HNF-56398 Revision 1

HNF-56398
Revision 1

Hanford Well Maintenance and Inspection Plan

Previously BHI-01265, Revision 0

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

CH2MHILL
Plateau Remediation Company
P.O. Box 1600
Richland, Washington 99352

Approved for Public Release;
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HNF-56398
Revision 1

Hanford Well Maintenance and Inspection Plan

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Document Type: PLAN Program/Project: S&GRP

R. L. Cathel
CH2M HILL Plateau Remediation Company

Date Published
April 2014

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

CH2MHILL
Plateau Remediation Company
P.O. Box 1600
Richland, Washington 99352

APPROVED
By GE Bratton at 10:11 am, Apr 10, 2014

Release Approval Date

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Hanford Well Maintenance and Inspection Plan
HNF-56398, Revision 1
Previously BHI- 01265, Revision 0

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Terms

WAC	*Washington Administrative Code*
TSD	treatment, storage, and disposal
RCRA	*Resource Conservation and Recovery Act of 1976*
RCW	*Revised Code of Washington*

1.0 INTROUCTION

This document presents the well maintenance and inspection plan for use in supporting groundwater activities at the Hanford Site. Wells located across the Hanford Site are used by Site contractors for a variety of groundwater programs. As such, these wells require various types of inspections and/or maintenance during their lifecycles. The wells that must be maintained are defined in Section 2.0, "Requirements."

2.0 REQUIREMENTS

Washington Administrative Code (WAC) 173-160, "Minimum Standards for Construction and Maintenance of Wells," states "It is the responsibility of the resource protection well operator, resource protection well contractor and the property owner to take whatever measures are necessary to guard against waste and contamination of the groundwater resource."

The provisions of the dangerous waste section of the *Resource Conservation and Recovery Act of 1976 Permit for the Treatment, Storage, and Disposal of Dangerous Waste at the Hanford Site* Permit are controlled by the "State of Washington Hazardous Waste Management Act of 1976" (RCW 70.105). Part II.F.2.a of (WA7890008967) states that "…the Permittees shall inspect the integrity of active resource protection wells as defined by WAC 173-160-030 subject to this Permit at least once every five (5) years." Wells subject to the RCRA Permit requirements are defined as wells actively monitoring treatment, storage, and disposal (TSD) unit closures (in Part V of the Permit); TSD operating units (in Part III of the Permit); and TSD units undergoing post-closure/modified closure (Part VI of the Permit).

3.0 SCHEDULE

The list of RCRA wells to be considered for maintenance or inspection will be based on a review of information on the current wells. This review may include field sampling notations, previous inspection results, or other data collected during sampling of the wells. In addition, the installation date and/or location of a well will also be considered.

Well inspections, consistent with the requirements in permit condition II.F.2.a, will occur in 2015, and continue every 5 years after that. The schedule will accommodate changes that will occur with the addition of new wells, adjustments in the TSD unit closures, and wells that are no longer needed for monitoring.

4.0 WELL INSPECTIONS

Well inspections are conducted as an integral part of field maintenance activities. Inspections include visual examination of the well site, surface components of the well structure (e.g., barrier posts, concrete surface pad and seal, protective well casing, well cap), identification of equipment installed in the well, and where possible measurements of the depths to water and/or bottom of the well. Inspections are documented on field reports.

5.0 WELL MAINTENANCE

Based on review of the 5 year inspection results, or other evaluations such as field sampling notations, well sampling issues, etc., well maintenance for groundwater monitoring wells will be performed as needed. Well maintenance will include the following tasks, as necessary, to restore the well to its intended use:

1. Removing groundwater sampling pump system and/or aquifer testing instrumentation/equipment
2. Inspecting and repairing (or replacing, as necessary) the sampling pump system and/or aquifer testing instrumentation/equipment
3. Cleaning the well casing perforations
4. Inspecting and cleaning well screen or repair of well screen (if possible)
5. Removing debris and fill material
6. Performing borehole video camera surveillance
7. Re-installing sampling and/or aquifer testing instrumentation/equipment
8. Redeveloping the well after performing maintenance
9. Inspecting final conditions after well maintenance (e.g. cap is replaced, concrete surface pad integrity, lock is secure, etc.)
10. Documenting well conditions and maintenance activities

6.0 REFERENCES

WA7890008967, 2007, *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste*, as amended, Washington State Department of Ecology, Richland, Washington *Resource Conservation and Recovery Act of 1976*, 42 U.S.C. 6901, et seq.

RCW 70.105, "State of Washington Hazardous Waste Management Act of 1976, "*Revised Code of Washington*, as amended.

WAC 173-160, "Minimum Standards for Construction and Maintenance of Wells," *Washington Administrative Code*, as amended.

7.0 BIBLIOGRAPHY

DOE-RL, 1994, *Hanford Site Groundwater Management Program*, DOE/RL-89-12, as amended, U.S. Department of Energy, Richland Operations Office, Richland, Washington.