Identifier: **EP-DIV-SOP-20012**	Revision: **0, IPC-2**	Los Alamos NATIONAL LABORATORY EST.1943
Effective Date: 12/1/11	Next Review Date: 6/6/16	

Environmental Programs Directorate
Project Management Field Services

for

INSTALLING, INSPECTING, AND MAINTAINING INDIVIDUAL PERMIT STORM WATER CONTROL MEASURES

APPROVAL SIGNATURES:

Author:	**Organization**	**Signature**	**Date**
Alethea Banar	ET-ER	/s/Alethea Banar	11/30/11
Responsible Line Manager:	**Organization**	**Signature**	**Date**
Steven Veenis	PMFS-DO	/s/Steven Veenis	11/30/11

1.0 PURPOSE AND SCOPE

This procedure describes how to implement non-engineered controls to minimize pollutants in storm water discharges by installing, inspecting and maintaining storm water control measures (control measures). This procedure also includes inspection of engineered controls (e.g. weirs).

2.0 BACKGROUND AND PRECAUTIONS

2.1 Background

The Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) Individual Permit (IP) requires the condition of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs), collectively referred to as Sites, at Los Alamos National Laboratory (LANL), be assessed for potential pollutants, presence of erosion, condition of existing control measures, and need for additional control measures. Associated Sites are organized into site monitoring areas (SMAs). The permit requires Los Alamos National Security, LLC and the U.S. Department of Energy to implement structural and non-structural, vegetative, and/or stabilization control measures to achieve erosion and sediment control and implement storm water runon/runoff management practices to minimize pollutants in storm water discharge.

Site-specific control measures will be installed and implemented to minimize storm water pollutant discharges. The selection, design, installation and implementation of these measures will be in accordance with the LANL Storm Water BMP Manual, good engineering practices and manufacturer's specifications. Storm water control measures will have the additional step of being verified and, if necessary, certified (to be covered in a separate SOP).

SMAs will be inspected at the following times:

- After a significant event, such as fire, which could significantly impact the control measures and environmental conditions in the affected area(s)
- Within 15 calendar days of a rain event at or near the Site(s) registers 0.25" or more of rain within 30 minutes
- Analytical results from samples collected for confirmation monitoring are above Target Action Levels IPC-2
- At least annually for changes of conditions affecting erosion

All control measures will be maintained in effective operating condition. If during inspections or any other event or observation, control measures are identified as not operating effectively, they will be repaired or replaced.

A "route lead" may be appointed as the primary person with responsibility for the steps in this procedure. Several route leads may be appointed with responsibility for a subset of locations. This procedure designates route lead and Project Manager as Subcontractor roles however either may be filled by a LANS employee as needed.

2.2 Precautions

This procedure is used with an approved Integrated Work Document (IWD) if needed and/or other safety documents as required.

3.0 EQUIPMENT

Inspections

- Copy of this procedure
- Copy of Integrated Work Document (IWD)
- Excavation Permit (as necessary)
- 20012-1 Control Measure Inspection Form (Attachment 1)
- 20012-2 Visual Inspection Form (Attachment 2)
- 20012-4 Control Measure Installation Form (Attachment 4)
- 20012-5 Control Measure Maintenance Form (Attachment 5)
- LANL Storm Water BMP Manual or Site plans and specifications (see IP SDPPP)
- Expanded Site Field Maps showing control measures
- Global Positioning System (GPS) unit (as necessary)
- Radio
- Pager
- Necessary keys
- Digital camera set to correct date and time
- Photo Authorization Approval form
- Appropriate PPE including safety glasses with side shields and nitrile gloves or equivalent work gloves
- Cell Phone (Government cell phone only in cleared areas)
- Ball point pen

Additional equipment needed for Installation and Maintenance

- Leather gloves or equivalent work gloves
- Shovels / pulasky
- Rock Bar
- Sledge Hammer
- Leatherman type tool
- Wooden stakes
- Wire staples
- Flagging
- Tags
- Permanent marker
- Plastic wire “zip” ties
- Backpacks (if needed)
- Wire stripper/clamps

4.0 STEP-BY-STEP PROCESS DESCRIPTION

4.1 Obtain Excavation Permits

Subcontractor Project Manager	1. In January of each year or when necessary, initiate the review of all existing excavation permits for the Sites by going through LANL's excavation permit submittal process. Contact the appropriate Laboratory offices for review and approval. If a Site is not covered under an existing excavation permit then initiate a new excavation permit. Excavation permits are only good for six months at a time. After six months, the excavation permits will need to be extended for another six months and they can only be extended once if nothing changes at the Sites.	
	2. Compile all excavation permits in a master binder and keep it at the main field office location. Provide copies to the Field Team Lead (FTL). When necessary make copies for the route leads for field use.	

4.2 Prepare for Fieldwork

Tracking and Reporting (TR) Team	1. Following a trigger event, exceedance, or request, prepare a list of SMAs at which to inspect, maintain, or install control measures.	
	2. Generate the appropriate Work Order form from Maintenance Connection (e.g. Control Measure Installation Form 20012-4, Control Measure Inspection Form 20012-1, Visual Inspection Form 20012-2, or Control Measure Maintenance Form 20012-5).	IPC-2
	3. For rain event inspections, if several storms occur over a period not to exceed 15 calendar days from the first event, a single inspection following these storms is sufficient provided that the inspection occurs no more than 15 calendar days from the date of the first storm, and inspection was not completed prior to following events. The TR Team will not issue Work Orders that can be covered under a previous event.	
	4. Notify FTL or designee through Maintenance Connection or by e-mail to issue Work Order forms for release to the Subcontractor Project Manager or designee.	
Field Team Lead or Designee	5. Issue or deny each Work Order form in Maintenance Connection.	
TR Team	6. Create PDF of Work Order forms.	
	7. Distribute PDF of Work Order Forms to the Subcontractor Project Manager or designee and copy the FTL and Subcontract Technical Representative.	

Subcontractor Project Manager	8.	Receive Work Order forms, review forms, and e-mail confirmation of receipt to the TR Team.
	9.	Distribute Work Order forms to Route Lead field personnel.
	10.	Inform (e.g., by e-mail) the Field Operations designee of the schedule for control measure work and locations up to a week before (preferred) but no later than the day before (for minor changes) to be added to the appropriate plan of the day.
	11.	Conduct pre-job briefing with field personnel using the current Integrated Work Document. Obtain worker signatures on new or newly-revised IWDs. Two people are required for field work. Work should only be done during daylight hours. Extended work hours, if needed, must be approved by a supervisor (e.g. Subcontractor supervisor and/or LANL Project Manager).
	12.	For work at Sites operated by Weapons Facility Operations or Nuclear Environmental Sites, notify the appropriate access control before traveling to those Sites. The IWD Part II will address specific requirements and training for these Sites.
	13.	Obtain any necessary additional paperwork before conducting this work, including IWD's, and excavation permits.
	14.	Print a clean copy of the Expanded Site Field Map(s). Use the map and revision number identified as "Map ID" in the top left corner of the Work Order Form. If "Map ID" is blank, use the map and revision number identified on the last rain event Work Order Form. Mark map as a field copy.
	15.	Obtain a copy of the LANL Storm Water BMP Manual (http://int.lanl.gov/orgs/env/rcra/qa.shtml?2) or Site plans and specifications from the SDPPP for field guidance on function, installation, inspection, maintenance, and failure criteria.
	16.	Gather the required equipment for the work to be done.

4.3 Install New Control Measures

Field Team Lead or Designee	1.	Review recommendations from field inspector's notes on Control Measure Installation Form (20012-4) or other requests and determine type and location of new control measure(s).
	2.	If needed, conduct a field review. The field review is a group exercise to discuss potential SMA storm water issues with the Subcontract Project Manager and develop the final suite of controls to be incorporated into a work order.
	3.	Approve recommended corrective action or describe alternative. Request Work Order(s) from the TR Team.
TR Team	4.	Generate requested Work Order Form(s) as necessary (See Section 4.2).

Subcontractor Project Manager	5.	Receipt of Form 20012-4 indicates that control measure installation has been approved by FTL. Schedule work to be completed by the target date appearing on the form.
Subcontractor Project Manager or Designee	6.	Determine if new excavation permit is necessary for new installations and obtain if needed.
	7.	Conduct a tailgate safety meeting and obtain all worker signatures on tailgate meeting form.
Subcontractor Route Lead	8.	Perform the requested installation as instructed in column 1 and complete the required fields on form 20012-4 (Attachment 4). Install control measure(s) according to the LANL Storm Water BMP Manual (http://int.lanl.gov/orgs/env/rcra/qa.shtml?2). Engineered Control Measures will be installed as per individual Site plans and specifications.
	9.	If installation could not be performed as instructed, document the reason(s) in column 3 of Form 20012-4.
	10.	Mark the location of installed control measure(s) on the Expanded Site Field Map by drawing the control measure(s) in with a fine line permanent marker. Label the drawing with the control measure type and initial and date. Attach the map to Form 20012-4.
	11.	Installation may be discontinued during periods or conditions that make Sites dangerous for worker safety or prevent personnel from safely accessing Sites (e.g. weather-related events such as flash floods, flooding, lightning, wildfires, hail, icy roads, deep snow, LANL Operations). If conditions prevent installation, document the conditions on Form 20012-4 and notify the FTL or designee within 24 hours. Multiple attempts can be documented on the original installation form. If installation cannot be completed by the target date, return forms to the TR Team for reissuance of the forms (if necessary).
	12.	If necessary, take digital photos of the site to document the installation and location. If photos are taken, ensure the file name includes Work Order number and date when downloaded to a computer.
	13.	If photos are taken in a secure area, follow the guidance in the Photographic Equipment and Activity Authorization form (see LANL Form 1897PA, PS-1) and obtain a Derivative Classifier (DC) review of the photo(s).
	14.	Turn in completed form, maps, and any other documentation to Subcontract Project Manager or designee at the end of each day. See Section 4.6.
4.4 Inspect Control Measures and Perform Routine Maintenance		
Subcontractor Project Manager	1.	Receipt of Work Order Forms indicates that SMA inspections have been approved by FTL. Schedule work to be completed by the target date appearing on form.

Subcontractor Project Manager (cont.)	2. Conduct a tailgate safety meeting and obtain all worker signatures on tailgate meeting form.	
Subcontractor Route Lead	3. Perform the control measure or visual inspection and complete required fields on form 20012-1 (Attachment 1). Inspect control measure(s) according to the LANL Storm Water BMP Manual (http://int.lanl.gov/orgs/env/rcra/qa.shtml?2) and/or Site plans and specifications for specific materials and structures.	IPC-2
	4. If map corrections are required and mark the Expanded Site Field Map with corrections. Initial and date all changes. If more space is needed, continue notes in the “Additional Notes” section. Attached map to Form 20012-1.	
	5. If routine maintenance (e.g. retrenching wattle, rebuilding rock check dam, cleaning out intake of stand pipe) of a control measure is required, and the work can be performed at the time of inspection, then perform work and describe work performed on Form 20012-1. Photographic evidence of routine maintenance is not required.	
	6. If a control measure needs more than routine maintenance (e.g. repair of a catastrophic failure, modification, or new control measure installation) then describe the condition on Form 20012-1 If a control measure is not operating effectively, describe the existing backup control measure or describe backup control measure installed at time of inspection.	
	7. Inspections and maintenance may be discontinued during periods or conditions that make Sites dangerous for worker safety or prevent personnel from safely accessing Sites (e.g. weather-related events such as flash floods, flooding, lightning, wildfires, hail, icy roads, deep snow, and LANL operations). If conditions prevent a site inspection or maintenance, document the conditions on Form 20012-1 and notify the FTL or designee within 24 hours. Multiple attempts can be documented on the original inspection form up to the target date. After the target date, return forms to the TR Team for reissuance of the forms (if necessary).	
	8. If necessary, a digital photo(s) may be taken of the Site, SMA, or control measures to document conditions. If a photo is taken, ensure the file name includes Work Order number and date when downloaded to a computer.	
	9. If photos were taken in a secure area, follow the guidance in the Photographic Equipment and Activity Authorization form (see LANL Form 1897PA, PS-1) and obtain a DC review of the photo(s).	
	10. Turn in completed forms, maps, and any other documentation to the Subcontract Project Manager or designee at the end of each day. (See Section 4.6).	

4.5 Perform Non-routine Maintenance

Field Team Lead or Designee	1.	Review recommendations from field inspector's notes on Control Measure Maintenance Form (20012-5) or other requests and determine appropriate maintenance for control measure(s).
	2.	Approve recommended corrective action or describe alternative. Request Work Order(s) from the TR Team.
TR Team	3.	Generate requested Work Order Form(s) as necessary (See Section 4.2).
Subcontractor Project Manager	4.	Receipt of Form 20012-5 indicates that control measures non-routine maintenance has been approved by FTL. Schedule work to be completed by the target date appearing on the form.
	5.	Conduct a tailgate safety meeting and obtain all worker signatures on tailgate meeting form.
Subcontractor Route Lead	6.	Perform the requested maintenance as instructed in column 1 and complete the required fields on form 20012-5 (Attachment 5). Use the LANL Storm Water BMP Manual (http://int.lanl.gov/orgs/env/rcra/qa.shtml?2) and/or Site plans and specifications for specific materials and structures.
	7.	If maintenance could not be performed as instructed, document the reason(s) on Form 20012-5.
	8.	If control measure(s) have been modified, draw the modification on the Expanded Site Field Map with a fine line permanent marker (e.g. if an existing berm was extended, draw the extension on the map). Initial and date all changes. Attach the map to Form 20012-5.
	9.	Maintenance may be discontinued during periods or conditions that make Sites dangerous for worker safety or prevent personnel from safely accessing Sites (e.g. weather-related events such as flash floods, flooding, lightning, wildfires, hail, icy roads, deep snow, LANL Operations). If conditions prevent maintenance, document the conditions on Form 20012-5 and notify the FTL or designee within 24 hours. Multiple attempts can be documented on the original inspection form up to the target date. If maintenance cannot be completed by the target date, return forms to the TR Team for reissuance of the forms (if necessary).
	10.	If necessary, take digital photos of the site to document "before" and "after" the repair and the location. If photos are taken, ensure the file name includes Work Order number and date when downloaded to a computer.
	11.	If photos are taken in a secure area, follow the guidance in the Photographic Equipment and Activity Authorization form (see LANL Form 1897PA, PS-1) and obtain a DC review of the photo(s).

Subcontractor Route Lead (cont.)	12.	Turn in completed forms, maps, and any other documentation to Subcontract Project Manager or designee at the end of each day. See Section 4.6.
4.6 Perform Review and Acceptance		
Subcontractor Project Manager	1.	Conduct an internal review of forms and maps for errors. Correct errors.
	2.	Return completed original forms and maps to the TR Team by noon the day following completion of the field work.
TR Team	3.	Date and initial “Accepted” line of the “LANL Personnel Use Only” box on each form indicating the form was received.
	4.	Conduct review of forms and maps and resolve any discrepancies with the Route Lead. The Route Lead will be available within 24 hours of being notified of a discrepancy. Date and initial “Tech Review” line of the “LANL Personnel Use Only” box on each form reviewed.
	5.	Enter form information into Maintenance Connection database.
	6.	Notify FTL or designee when forms and maps are ready for review by the Field Team Lead.
Field Team Lead or Designee	7.	Conduct a technical review of forms and maps. Resolve any discrepancies with the Route Lead.
	8.	For installations, the FTL or designee field verifies storm water control measures have been properly installed and installed in the correct location.
	9.	Date and initial “FTL” line of the “LANL Personnel Use Only” box on each form reviewed. Indicate if the FTL made any corrections to the map and if the work performed by the Route Lead was sufficient to fulfill the work requested on the Work Order.
	10.	Initiate corrective actions and/or follow up work as necessary.
	11.	Mark Work Order forms “Finalized” in Maintenance Connection.
	12.	Generate Delegated Official Signature Forms (20012-6, Attachment 6) corresponding to inspection work orders.
	13.	The FTL delivers the Control Measure Inspection Form(s) (20012-1, Attachment 1) with Delegated Official Signature Forms to the Delegated Official of Permittees. Return Installation Forms and Maintenance Forms to the TR Team.

Delegated Official of Permittees	14. Review forms and sign Delegated Official Signature Forms. Return forms to the TR Team.
TR Team	15. Assemble forms, maps, and any other pertinent information into a records package and submit to Storm Water Records Management point of contact.

5.0 RESULTING RECORDS

The following records are generated as a result of this procedure and will be submitted to and maintained in the Storm Water Records Management System.

- 20012-1 Control Measure Inspection Form
- 20012-2 Visual Inspection Form
- 20012-4 Control Measure Installation Form
- 20012-5 Control Measure Maintenance
- 20012-6 Delegated Official of the Permittees Signature Form
- Expanded Site Field Maps showing control measures
- Photos (as applicable)
- Derivative Classifier (DC) review documentation of photos (as applicable)

IPC-2

Emails and memos of all decisions and actions related to the control measure program (as applicable).

6.0 DEFINITIONS

Not applicable.

7.0 PROCESS FLOW CHART

Not applicable.

8.0 ATTACHMENTS

Attachment 1: Control Measure Inspection Form (Example)

Attachment 2: Visual Inspection Form (Example)

Attachment 3: Control Measure and Visual Inspection Instructions for Attachment 1 & 2

Attachment 4: Control Measure Installation Form (Example)

Attachment 5: Control Measure Maintenance Form (Example)

Attachment 6: Delegated Official of the Permittees Signature Form (Example)

IPC-2

9.0 REVISION HISTORY

Revision No. *[Enter current revision number, beginning with Rev.0]*	Effective Date *[DCC inserts effective date for revision]*	Description of Changes *[List specific changes made since the previous revision]*	Type of Change *[Technical (T) or Editorial (E)]*
0	03/15/06	New procedure issued as ENV-WQH-SOP-069, "FFCA Inspection and Maintenance Documentation"	T
0	10/14/08	Major revision of former ENV-WQH-SOP-069, issued as SOP-5217 "Inspecting, Maintaining, and Installing BMPs"	T
1	06/09/10	Technical revision of SOP-5217 updating for new EPA issued permit, issued as SOP-5217 "Inspecting, Maintaining, and Installing Storm Water Control Measures"	T
0	6/6/11	New document control number assigned. Supersedes SOP-5217, R1. Updated with editorial changes and reference changes. Revision incorporates clarifications on inspection form and added Delegated Official of the Permittees Signature Form.	E
0, IPC-1	10/5/11	Updated form titles, clarification of backup control measures.	T/E
0, IPC-2	12/01/11	Added new Visual Inspection Form as Attachment 2; added references to the form in the document process description; updated changes to Attachments.	T/E

Click here for "Required Read" credit.

If you don't have A-level access, contact creichelt@lanl.gov.

ATTACHMENT 1

EP-DIV-SOP-20012-1

CONTROL MEASURE INSPECTION FORM

SOP-20012-1

Control Measure Inspection

Work Order ID: BMP-10831

IP-RG-NCOM : R002 : R-SMA-1

Project: IP Rain Event on October 20, 2010 at RG-NCOM

Rain Event: 10/20/2010

Target Date: 11/3/2010

Map ID: 2, R002-10-0017-225-R1-R4

Reason: IP Rain Event on October 20, 2010 at RG-NCOM

Project ID: P-BMP-665

1 Date:_____ Time:_____

Name/Z#:_____

Name/Z#:_____

18 Lead Signature:_____

"I confirm the information as recorded is true, accurate and complete."

Best Management Practice (BMP)/Control Measure	Is BMP Operating Effectively?	In Need of Maintenance?	Is BMP correctly located on Site Map? (exclude vegetation)	Describe: (continue on back if needed) 1. Note "No Deficiency Found" (NDF), or identify needed maintenance, modification, repair, or replacement. 2. If needed, identify correct location of BMP(s) on Site Map. 3. If not operating effectively, decribe existing or installed backup control. 4. If repair made to BMP describe.
Permanent Vegetation Grasses and Shrubs [R00202010003] .SC	❒Yes ❒No 2	❒No ❒Modification ❒Repair ❒Replacement 3	NA 8	4 5 6 7
Rock Check Dam [R00206010005] .ROF EC	❒Yes ❒No	❒No ❒Modification ❒Repair ❒Replacement	❒Yes ❒No	
Gabions [R00207010001] .RON EC	❒Yes ❒No	❒No ❒Modification ❒Repair ❒Replacement	❒Yes ❒No	
Gabions [R00207010002] .RON EC	❒Yes ❒No	❒No ❒Modification ❒Repair ❒Replacement	❒Yes ❒No	
Gabion Blanket [R00207020004] .RON SC	❒Yes ❒No	❒No ❒Modification ❒Repair ❒Replacement	❒Yes ❒No	

EXAMPLE

ATTACHMENT 1

EP-DIV-SOP-20012-1

CONTROL MEASURE INSPECTION FORM

SOP-20012-1

Control Measure Inspection

Work Order ID: BMP-10831 **Project ID: P-BMP-665**

Have you changed the location of a BMP on the Site Map?	❒Yes ❒No If Yes, submit altered Site Map with this form. 9
Have you ammended the Site Map in any other way?	❒Yes ❒No If Yes, submit altered Site Map with this form. 10

SMA/Site Review		Note "No Deficiency Found" (NDF), or describe deficiency below. (continue below if needed)
Is there evidence of floatable waste, floatable garbage, or floatable debris within the SMA that could be discharged to receiving waters?	❒Yes ❒No 11	
Is there evidence of the introduction of raw, final, or waste material to the SMA?	❒Yes ❒No 12	
Asphalt and Tar Remnant Site [C-00-041] Has there been a significant increase in erosion potential at the Site since the last inspection?	❒Yes ❒No 13	
Has there been a significant increase in erosion potential at the SMA since the last inspection?	❒Yes ❒No 14	

Photo Taken?: ❒No ❒Yes Photo ID: 15

Additional Notes: 16

17 Continuation Form: ❒Yes ❒No

EXAMPLE

Certification Statement of Authorization

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

Name of Delegated Official of Permittees: Steve Veenis *Z#:* 109949

*Date:*_____ *Delegated Official Signature:* Signature on File

LANL PERSONNEL USE ONLY (Initials and dates)		
Accepted	Tech QC	FTL

ATTACHMENT 2

EP-DIV-SOP-20012-2

VISUAL INSPECTION FORM

IPC-2

SOP-20012-2

Visual Inspection

Work Order ID: BMP-21068

Project ID: P-BMP-1684

IP-RG-NCOM : R002 : R-SMA-1

1 Date:_____ Time:_____

Project: Visual Inspection Following TAL Exceedance

Name/Z#:_____

Target Date: 11/30/2011

Name/Z#:_____

Map ID: 2, R002-10-0017-225-R1-R4

18 Lead Signature:_____

Reason: Visual Inspection Following TAL Exceedance

"I confirm the information as recorded is true, accurate and complete."

Best Management Practice (BMP)/Control Measure	Is BMP Operating Effectively?	In Need of Maintenance?	Is BMP correctly located on Site Map? (exclude vegetation)	Describe: (continue on back if needed) 1. Note "No Deficiency Found" (NDF), or identify needed maintenance, modification, repair, or replacement. 2. If needed, identify correct location of BMP(s) on Site Map. 3. If not operating effectively, decribe existing or installed backup control. 4. If repair made to BMP describe.
Permanent Vegetation Grasses and Shrubs [R00202010003] .EC	❒ Yes ❒ No 2	❒ No ❒ Modification 3 ❒ Repair ❒ Replacement	NA 8	4 5 6 7
Rip Rap [R00204060006] .RON EC	❒ Yes ❒ No	❒ No ❒ Modification ❒ Repair ❒ Replacement	❒ Yes ❒ No	
Rip Rap [R00204060007] .RON EC	❒ Yes ❒ No	❒ No ❒ Modification ❒ Repair ❒ Replacem	❒ Y ❒ N	
Rock Check Dam [R00206010005] .ROF SC	❒ Yes ❒ No	❒ No ❒ ification ❒ Rep ❒ Rep en	Ye No	
Gabions [R00207010001] .RON SC	❒ Yes ❒ No	❒ No ❒ Mo ification epair ❒ Replacement	❒ Yes ❒ No	
Gabions [R00207010002] .RON SC	❒ Yes ❒ No	❒ No ❒ Modification ❒ Repair ❒ Replacement	❒ Yes ❒ No	
Gabion Blanket [R00207020004] .RON EC	❒ Yes ❒ No	❒ No ❒ Modification ❒ Repair ❒ Replacement	❒ Yes ❒ No	

ATTACHMENT 2

EP-DIV-SOP-20012-2

VISUAL INSPECTION FORM

Los Alamos NATIONAL LABORATORY EST.1943

IPC-2

SOP-20012-2 **Visual Inspection**

Work Order ID: BMP-21068 **Project ID: P-BMP-1684**

Have you changed the location of a BMP on the Site Map?	❒Yes ❒No If Yes, submit altered Site Map with this form. 9
Have you ammended the Site Map in any other way?	❒Yes ❒No If Yes, submit altered Site Map with this form. 10

SMA/Site Review		Note "No Deficiency Found" (NDF), or describe deficiency below. (continue below if needed)
Is there evidence of floatable waste, floatable garbage, or floatable debris within the SMA that could be discharged to receiving waters?	❒Yes ❒No 11	
Is there evidence of the introduction of raw, final, or waste material to the SMA?	❒Yes ❒No 12	
Asphalt and Tar Remnant Site [C-00-041] Has there been an increase in erosion potential at the Site since the last inspection?	❒Yes ❒No 13	
Has there been an increase in erosion potential at the SMA since the last inspection?	❒Yes ❒No 14	

Photo Taken?: ❒No ❒Yes Photo ID: 15

Additional Notes: 16

17 Continuation Form: ❒Yes ❒No

Certification Statement of Authorization

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

Name of Delegated Official of Permittees: Steve Veenis *Z#:* 109949

*Date:*_____ *Delegated Official Signature:* Signature on File

LANL PERSONNEL USE ONLY (Initials and dates)		
Accepted	Tech QC	FTL

ATTACHMENT 3 – INSTRUCTIONS FOR ATTACHMENT 1 & 2

EP-DIV-SOP-20012-3

CONTROL MEASURE AND VISUAL INSPECTION INSTRUCTIONS

IPC-2

1. Enter the date and time the inspection is completed and the names and Z numbers of the field personnel performing the work in the upper right corner of Form 20012-1. If more than two field personnel were on site, document the additional personnel in the “Additional Notes” section. IPC-2

2. Verify and document each control measure at the site (column 1, Form 20012-1) is operating effectively by checking the “Yes” or “No” box in column 2, Form 20012-1.

3. Document if control measure(s) are in need of maintenance by checking the type of maintenance required in column 3, Form 20012-1. If maintenance is Not required, check the “No” box.

4. If routine maintenance (e.g. retrenching wattle, rebuilding rock check dam) is performed at the time of inspection, describe work performed in Column 5, Form 20012-1 (reference LANL Storm Water BMP Manual (http://int.lanl.gov/orgs/env/rcra/qa.shtml?2), SDPPP or Site plans and specifications). If more space is needed, continue notes in the “Additional Notes” section. Photographic evidence of routine maintenance is not required.

5. If a control measure needs more than routine maintenance, such as repair of a catastrophic failure, modification, or a new control measure installation, then describe the condition in Column 5, Form 20012-1. If more space is needed, continue notes in the “Additional Notes” section. If the field inspector deems it necessary for clarification, s/he may attach an additional Expanded Site Field Map showing recommendation.

6. If a control measure is not operating effectively, describe the existing backup control measure or describe installed backup control measure in Column 5, Form 20012-1. Backup control measure must match functionality of non-operating control measure as identified on form. If more space is needed, continue notes in the “Additional Notes” section. If the field inspector deems it necessary for clarification, s/he may attach an additional Expanded Site Field Map showing recommendation.

7. If no maintenance is required or other deficiency found, write “no deficiency found” or “NDF” in Column 5, Form 20012-1

8. Verify that the location of each control measure is accurately represented on the Expanded Site Field Map and document in column 4, Form 20012-1.

   If map corrections are required, document in Column 5, Form 20012-1 and mark the Expanded Site Field Map with corrections. Initial and date all changes. If more space is needed, continue notes in the “Additional Notes” section.

   Permanent Vegetation areas will not be plotted on Expanded Site Field Maps and should be marked “Not Applicable”.

9. Document any control measure location changes to the Expanded Site Field Map by checking the “Yes” or “No” box. If an amendment to a control measure location on the map is recommended, an altered Expanded Site Field Map must be submitted with Form 20012-2 showing the recommendation(s).

ATTACHMENT 3 – INSTRUCTIONS FOR ATTACHMENT 1 & 2

EP-DIV-SOP-20012-3

CONTROL MEASURE AND VISUAL INSPECTION INSTRUCTIONS

IPC-2

10. Document any other changes to the Expanded Site Field Map by checking the "Yes" or "No" box. If an amendment on a map is recommended, an altered Expanded Site Field Map must be submitted with Form 20012-1 showing the recommendation(s).

11. Verify and document any evidence of floatable waste, floatable garbage, or floatable debris within the SMA that could be discharged to receiving waters. If a deficiency is found, the field inspector must remove and properly dispose of the materials or describe how appropriate controls are managing the materials If more space is needed, continue notes in the "Additional Notes" section. If no deficiency is found, write "no deficiency found" or "NDF".

12. Verify and document any evidence of introduction of raw, final, or waste material at the SMA (e.g. roll off bins, metals, stockpile materials, containerized waste water from another program). If a deficiency is found, the field inspector must describe the condition of the materials (e.g. covered, stored above ground, containerized) and recommend controls for controlling discharge to receiving waters. If more space is needed, continue notes in the "Additional Notes" section. If no deficiency is found, write "no deficiency found" or "NDF".

13. Verify and document any significant increase in erosion potential at the Site(s) since the last inspection on Form 20012-1 by checking the "Yes" or "No" box. If a significant deficiency is found, the field inspector must describe the changes and make recommendations for storm water controls. If more space is needed, continue notes in the "Additional Notes" section. If no deficiency is found, write "no deficiency found" or "NDF".

14. Verify and document any significant increase in erosion potential at the SMA since the last inspection on Form 20012-1 by checking the "Yes" or "No" box. If a significant deficiency is found, the field inspector must describe the changes and make recommendations for storm water controls. If more space is needed, continue notes in the "Additional Notes" section. If no deficiency is found, write "no deficiency found" or "NDF".

15. If taking photos is necessary, document any digital photos taken by checking the "Photos Taken?" "Yes" or "No" box.

    Take digital photos of the site to document the installation and location. Ensure the file name includes Work Order number and date when downloaded to a computer. If photos are taken in a secure area, follow the guidance in the Photographic Equipment and Activity Authorization form (see LANL Form 1897PA, PS-1) and obtain a DC review of the photo(s).

16. Document any additional notes or Site information in the "Additional Notes" section. If no notes are needed, write "none". Document the reevaluation of existing control measures conducted during a visual inspection. IPC-2

17. Indicate if a continuation form was used by checking the "Continuation Form" "Yes" or "No" box. Attach any continuation forms to Form 20012-1.

18. The Lead Inspector and a field team member will review the form(s) for accuracy. The Lead Inspector will certify that the information submitted is "true, accurate, and complete" by signing and dating "Lead Signature" line, Form 20012-1.

ATTACHMENT 4

EP-DIV-SOP-20012-4

CONTROL MEASURE INSTALLATION FORM

IPC-2

Control Measure Installation

Work Order ID: BMP-3848 **Project ID: P-BMP-1394**

IP-RG340 : Q001 : CHQ-SMA-0.5

1 Date: _____ Time: _____

Target Date: 9/15/2011

Name/Z#: _____

Route, Map ID: 4, Q001-10-0017-42-CHQ0.5-R3

Name/Z#: _____

Reason: Control Measure Installation example

9 Lead Signature: _____

"I confirm the information as recorded is true, accurate and complete."

1. Mark Site Map with all new BMP updates. 8

2. Submit Site Map with this form.

Best Management Practice (BMP)/Control Measure Instructions.	Is work completed as instructed?	Description of Performed Activities (use Additional Notes section if necessary)
Install rock berm as marked on map. rof/sc 2	❒Yes ❒No 3	4

Photo Taken? ❒No ❒Yes: Photo ID: 5

Additional Notes: 6

7 Continuation Form: ❒Yes ❒No

EXAMPLE

LANL PERSONNEL USE ONLY (Initials and dates)

Accepted	Tech QC	FTL
		Corrections made to map ❒Yes ❒No Performed work fulfills WO ❒Yes ❒No

ATTACHMENT 4

EP-DIV-SOP-20012-4

CONTROL MEASURE INSTALLATION INSTRUCTIONS

IPC-2

1. Enter the date and time installation is completed and the names and Z numbers of the field personnel performing the work in the upper right corner of Form 20012-4. If more than two field personnel were on site, document the additional personnel in the “Additional Notes” section.

2. Perform the requested installation as instructed in column 1 of Form 20012-4.

3. Verify and document the installation was performed as instructed in column 2, Form 20012-4 by checking the “Yes” or “No” box. Any deviation from the instructions requires a description of the work completed and the reason(s) for the deviation.

   If installation could not be performed as instructed, document the reason(s) in column 3 of Form 20012-4. If more space is needed, continue notes in the “Additional Notes” section.

4. Document activities performed with a written description in column 3 of Form 20012-4. If more space is needed, continue notes in the “Additional Notes” section.

5. If taking photos is necessary, document digital photos taken by checking the “Photos Taken?” “Yes” or “No” box.

   Ensure the file name includes Work Order number and date when downloaded to a computer. If photos are taken in a secure area, follow the guidance in the Photographic Equipment and Activity Authorization form (see LANL Form 1897PA, PS-1) and obtain a DC review of the photo(s).

6. Document any additional notes or Site information in the “Additional Notes” section. If no notes are needed, write “none”.

7. Indicate if a continuation sheet was used checking the “Continuation Form” “Yes” or “No” box.

8. Document location of control measure(s) by drawing the control measure(s) on the Expanded Site Field Map with a fine line permanent marker. Label the drawing with the control measure type. Initial and date all changes. Attach the map to Form 20012-4.

   Other map change requests such as correcting the location of an existing control measure on the map will not be accepted on the Expanded Site Field Map copy used for installation. All such requests must be made separately.

9. The Lead Inspector and a field team member will review the form(s) for accuracy. The Lead Inspector will certify that the information submitted is “true, accurate, and complete” by signing and dating “Lead Signature” line, Form 20012-4.

ATTACHMENT 5

EP-DIV-SOP-20012-5

CONTROL MEASURE MAINTENANCE FORM

IPC-2

Control Measure Maintenance

Work Order ID: BMP-3855

Project ID: P-BMP-806

Q001 : CHQ-SMA-0.5 : Q00106010003

Target Date: 9/15/2011

Route, Map ID: 4, Q001-10-0017-42-CHQ0.5-R3

1 Date: _____ Time: _____

Name/Z#: _____

Name/Z#: _____

9 Lead Signature: _____

"I confirm the information as recorded is true, accurate and complete."

Reason: Control Measure Maintenance example

1. Mark Site Map with all new BMP updates. 8

2. Submit Site Map with this form.

Control Measure Maintenance	Note: If "No" provide correct information.	
Extend rock check dam -0003 to the northeast as marked on map and in field. 2	❒Yes ❒No 3	4

Photo Taken? ❒No ❒Yes: Photo ID: 5

Additional Notes: 6

7 Continuation Form: ❒Yes ❒No

ANL PERSONNEL USE ONLY (Initials and dates)

Accepted _____ Work QC _____ FTL _____

Corrections made to map ❒Yes ❒No

Performed work fulfills WO ❒Yes ❒No

ATTACHMENT 5

EP-DIV-SOP-20012-5

CONTROL MEASURE MAINTENANCE INSTRUCTIONS

IPC-2

1. Enter the date and time maintenance is completed and the names and Z numbers of the field personnel performing the work in the upper right corner of Form 20012-5. If more than two field personnel were on site, document the additional personnel in the “Additional Notes” section.

2. Perform the requested maintenance as instructed in column 1 of Form 20012-5.

3. Verify and document the maintenance was performed as instructed in column 2, Form 20012-5 by checking the “Yes” or “No” box. Any deviation from the instructions requires a description of the work completed and the reason(s) for the deviation.

   If maintenance could not be performed as instructed, document the reasons in column 3 of Form 20012-5. If more space is needed, continue notes in the “Additional Notes” section.

4. Document activities performed with a written description in column 3 of Form 20012-5. If more space is needed, continue notes in the “Additional Notes” section.

5. If taking photos is necessary, document digital photo taken by checking the “Photos Taken?” “Yes” or “No” box.

   Ensure the file name includes Work Order number and date when downloaded to a computer. If photos are taken in a secure area, follow the guidance in the Photographic Equipment and Activity Authorization form (see LANL Form 1897PA, PS-1) and obtain a DC review of the photo(s).

6. Document any additional notes or Site information in the “Additional Notes” section. If no notes are needed, write “none”.

7. Indicate if a continuation sheet was used checking the “Continuation Form” “Yes” or “No” box.

8. If control measure(s) have been modified, draw the modification on the Expanded Site Field Map with a fine line permanent marker. Initial and date all changes. Attach the map to Form 20012-5.

   Other map change requests such as correcting the location of an existing control measure on the map will not be accepted on the Expanded Site Field Map copy used for installation. All such requests must be made separately.

9. The Lead Inspector and a field team member will review the form(s) for accuracy. The Lead Inspector will certify that the information submitted is “true, accurate, and complete” by signing and dating “Lead Signature” line, Form 20012-5.

ATTACHMENT 6

EP-DIV-SOP-20012-6

Delegated Official of the Permittees Signature Form

IPC-2

Los Alamos NATIONAL LABORATORY EST.1943

Los Alamos NATIONAL LABORATORY EST.1943

To/MS: Memo to File
From/MS: Steven J. Veenis, CAP-DO, M997
Phone/Fax: 7-0013/ -
Symbol: N/A
Date: January 28, 2011

memorandum

Surface Water Program

CERTIFICATION SIGNATURE OF INDIVIDUAL PERMIT RAIN EVENT INSPECTIONS
Storm Water Control Measures Inspection Form Certification: 10/1/10 RG038

As per the Environmental Protection Agency issued Individual Permit for storm water discharges from Los Alamos National Laboratory, a signature of the delegated official of the Permittees shall be included on all inspection reports.

This memo serves as the certification to the attached storm water control measures inspection forms for rain event driven inspections. Inspection forms are batched by rain gage identification number.

Work Order ID	Site ID
BMP-3030	DP-SMA-0.6

Certification Statement of Authorization

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

Name of Delegated Official of Permittees: Steve Veenis

Z#: 109949

Date: _____

Delegated Official Signature: _____