



Minnesota Pollution Control Agency

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NIROP FRIDLEY
5090.3a

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

September 28, 2001

Commanding Officer
Southern Division
Naval Facilities Engineering Command
Attn.: Joel R. Sanders, Code 1868
P.O. Box 190010
North Charleston, SC 29419-9010

RE: Naval Industrial Reserve Ordnance Plant Superfund Site

Dear Mr. Sanders:

The Minnesota Pollution Control Agency (MPCA) staff has received the document entitled "Work Plan for Field Application to Enhance *In-Situ* Bioremediation of Chlorinated Solvents Via Vegetable Oil Injection at the Naval Industrial Reserve Ordnance Plant (NIROP) Fridley, Minnesota, dated September 2001" (Work Plan). The Work Plan is for the NIROP Superfund Site and was submitted pursuant to the Federal Facility Agreement, dated March 27, 1991, between the MPCA, the U.S. Environmental Protection Agency (U.S. EPA), and the U.S. Navy (Navy).

The MPCA staff hereby approves the Work Plan. The basis of this approval can be found in a series of email messages between the MPCA staff and the Navy and its contractors (too numerous to be cited here) that culminated in John Betcher's email message to Venky Venkatesh, dated August 30, 2001 (copy enclosed). The Work Plan includes a Quality Assurance Project Plan (QAPP); however, the MPCA staff review and approval of the QAPP was delegated to U.S. EPA by agreement between the MPCA staff and U.S. EPA.

Attn.: Joel R. Sanders
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If you have any questions regarding this letter, please contact me at (651) 296-7818.

Sincerely,

A handwritten signature in black ink that reads "David N. Douglas". The signature is written in a cursive style with a large, looped initial "D".

David N. Douglas, Project Manager
Superfund/RCRA Unit
Site Remediation Section
Metro District

DND:csa

cc: Thomas Bloom, U.S. EPA (w/enclosures)
Venky Venkatesh, CH2M Hill (w/enclosures)

Douglas, David

From: Betcher, John
Sent: Thursday, August 30, 2001 11:52 AM
To: 'Venky Venkatesh'; 'Henn, Keith'
Cc: 'Joel Sanders'; 'Richard Kuhlthau'; 'Tom Bloom (Reg. V - EPA)'; Douglas, David; Estuesta, Paul
Subject: FW: past procedures NIROP well sampling

Venky & Keith - Dave, Paul and I have reviewed the purge and sample method outlined by Tim Ruda in Joel's mail message. This method looks acceptable to us and is apparently consistent with the method used in the 1998-99 sampling events. The method should ensure the removal of stagnant water in the casing (by removing 3-5 well vols.) and gives us confidence that we are sampling a representative groundwater sample from the aquifer without undue influence from where the pump might be set within the screened interval. The higher purge rates will reduce the purge times. In addition, I know that some of the deep wells were purged for the 1999 AMR at a higher rate than 6 gpm (I recall up to 11 gpm) which is OK, as long as 1-2 feet of drawdown is not exceeded. This will not probably be needed for the Veg Oil wells as they are fairly shallow.

It is possible that for some shallow wells that the water level will be within the screen. If this is the case, the same procedure for purging and sampling can be used although in some cases the pump will have to be within the screened interval due to necessity.

If this resolves the issue that came up in this mornings call we probably don't need a conference call. Venky, if you have any questions please give me a call.

I hope this resolves the purge and sample SOP for everyone. For TtNUS this is the SOP that should be carried forward into the OU1 QAPP although the immediate issue at hand is the Veg Oil work plan and QAPP. Thanks.
JTB

From: Sanders, Joel (Efdsouth)[SMTP:SandersJR@EFDSOUTH.NAVFAC.NAVY.mil]
Sent: Thursday, August 30, 2001 9:44 AM
To: 'david.douglas@pca.state.mn.us'; John Betcher (E-mail)
Subject: FW: past procedures NIROP well sampling

Dave - Below is the info Tim Ruda provided us on past sampling on August 3, 2001.

Joel

-----Original Message-----

From: Sanders, Joel (Efdsouth)
Sent: Friday, August 03, 2001 3:17 PM
To: 'vvenkate@ch2m.com'; 'sladicm@ttnus.com'; 'hennk@ttnus.com'
Cc: Sanders, Joel (Efdsouth)
Subject: FW: past procedures NIROP well sampling

FYI - Keep this in mind when we receive MPCA comments. Thanks-Joel

-----Original Message-----

From: TIM_RUDA@udlp.com [mailto:TIM_RUDA@udlp.com]
Sent: Friday, August 03, 2001 3:08 PM
To: Sanders, Joel (Efdsouth)
Subject: past procedures NIROP well sampling

The details of the sampling in 98-99 were:

Set pump at top of the water column (1 foot below water column). The flow

rate
varied depending on well yield. Basically we set the pump at the top of
the
water column yet set the pump so we would see a slight drawdown (less than 1
foot). and then maintained that flowrate at the that water level. In the
deep
wells 6 gpm, intermediate well 2-3 gpm, shallow 1-.5 gpm. all wells were
sampled with pump turned down to around 500 ml minute. 3-5 well volumes
were
pulled out in compliance with stabilization parameters. We do have sampling
logs
to tell us what flowrate at each well. The USGS (Don V.) may have additional
field notes of the wells the last time they were sampled in 99. let me
know if
you need something more detailed. The field logs should be contained in 99
AMR.