



Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
March 4, 2005



Mr. Clint Marshall
New Mexico Environment Department
Ground Water Quality Bureau
Harold Runnels Building, Room N2250
1190 St. Francis Drive
Santa Fe, NM 87501

Subject: Notice of Intent to Discharge

Dear Mr. Marshall:



This letter is to confirm the information provided to you on March 1, 2005 during a teleconference with Mr. H. L. Plum, U.S. Department of Energy (DOE) and Mr. Stewart Jones, Washington TRU Solutions (WTS). There were discussions explaining the need for an extension of scheduled construction activities to emplace a liner in Storm Water Infiltration Control (SWIC) Pond A, and the discharge of storm water from Waste Isolation Pilot Plant (WIPP) SWIC Ponds 1, 2 and A.

Mr. Plum reported that excessive precipitation has continued to be recorded at the WIPP since the notifications submitted January 31 and February 2, 2005. Due to the additional storm water being collected, SWIC Pond 1 is at capacity and SWIC Pond 2 will be at or near capacity if predicted precipitation events occur March 4-7, 2005. Storm water that has collected in SWIC Pond A due to additional precipitation has caused further delay in construction activities even with the relief previously provided by the New Mexico Environment Department (NMED) after the Notification of Intent submitted February 2, 2005. He informed you that the number of precipitation events and the amount of rainfall resulting from these events is above the average expected for the WIPP site upon which the construction schedules were determined and SWIC capacities determined.

The excess volume of storm water collected requires DOE to provide a Notification of Intent to Discharge to NMED of the need to discharge storm water from the SWIC Ponds 1, 2 and A. This request is to allow the pumping and dispersal of excess storm water that has collected in SWIC Ponds 1, 2 and A to alternative locations for beneficial use of the water in the environment adjacent to these facilities. This is needed to prevent damage to SWIC Ponds 1 and 2 by exceeding their design capacity and to expedite the completion of construction activities for emplacement of liner material in SWIC Pond A.



Since the discussion of March 1, 2005, a review of options to prevent the collection of storm water in SWIC Pond A in the event of additional precipitation events have occurred. Engineers have determined that continued diversion of storm water from entering the storm water culverts on the east side of SWIC Pond A is appropriate and that this water will be diverted to SWIC Pond 2. Storm water collected from the parking lot north of SWIC Pond A that would normally pass through culverts on the north side of this facility will be diverted to the same location as storm water that has been and will be pumped from SWIC Pond A. With these actions, only rainfall falling on the surface of SWIC Pond A will affect the construction activities underway. SWIC Pond A has a surface area of 6.39 acres and the effect of additional precipitation events are expected to be limited. It is anticipated that this action will allow the soils in this facility to dry and allow work to resume in a minimum of 2 weeks of the date of approval of this request, unless the volume of precipitation is so large as to overwhelm measures described to control storm water collection.

It was concurred that discharge of these waters to the environment for beneficial reuse could be possible. You also stated that water samples must be collected and analyzed and this information forwarded with a formal written request as required by 20.6.2.1200 NMAC, Notice of Intent to Discharge to NMED. It was stressed that the collection of water samples must occur and this action completed prior to any such discharge occurring from a regulated site. NMED would review the information received in the notification and provide written determination of its decision by return mail. Both parties agreed that this re-use of collected storm water, when water quality had not been degraded, was appropriate in arid environments. DOE did discuss the sampling protocol to be used for this storm water. You agreed that, due to the fact that previous sampling and analysis events had determined this water to be of good quality, that DOE could limit analysis to the parameters that could be completed by site laboratory facilities. These parameters and field analytical results for the ponds are found in response to question 4 below. The storm water samples did not indicate presence of contaminants above levels of concern.

It was further discussed that WIPP's Discharge Permit (DP)- 831 contained a condition that construction activities to reshape and emplace an impermeable liner in SWIC Pond A would be completed by January 2005. Due to the unusually large number of precipitation events that occurred in September and October 2004 and the large volume of storm water collected in SWIC Pond A, the DOE did request an extension to complete construction to April 2005 by letter to NMED of November 12, 2004. NMED approved this extension November 18, 2004. As discussed above, continued delay of construction activities has occurred. Rather than requesting another date for construction activities to be completed in the future, you suggested that DOE provide a monthly status update of construction progress. DOE concurred that this would be an acceptable. DOE would like to suggest that this information be included in our current monthly report to NMED on freeboard remaining in the WIPP Sewage Lagoons permitted in DP-831.

DOE's oral and written notices are provided to NMED under 20.6.2.1201 NMAC.

- (1) Name of the person making the discharge;
Dr. Inés Triay, Acing Manager
- (2) The address of the person making the discharge;
U.S. Department of Energy
Carlsbad Field Office
P.O. Box 3090
4021 National Parks Highway
Carlsbad, NM 88221
(505) 234-7303
- (3) The location of the discharge;

Name	County	Township	Range	Section	Latitude	Longitude
Pond A	Eddy	22S	31E	SE ¼ of the SW ¼ of the SE ¼ of Section 20	N32, 22 Minutes, 19.9 Seconds	W103, 47 Minutes, 51.9 Seconds
Pond 1	Eddy	22S	31E	SW1/4 of the SE1/4 of the SE1/4 of Section 20	N 32 degrees, 22 minutes, 13.6' seconds	W 103, 47 minutes, 39.4 seconds
Pond 2	Eddy	22S	31E	SE1/4 of the SE1/4 of the SE1/4 of Section 20	N 32 degrees, 22 minutes, 13.7 seconds	W103 degrees, 47 minutes, 34.3 seconds

- (4) An estimate of the concentration of water contaminates in the discharge; and add type of results;

Parameter	Pond A Results	Pond 1 Results	Pond 2 Results
Ph	8.20	8.19	7.58
Specific Gravity @ 21° C	1.002	1.002	1.002
Specific Conductance @ 25° C	556	602	168
Bicarbonate of Alkalinity HCO ₃	115.2	83.3	47.7
Chloride mg/l	103	132	22
Divalent Cations meq/l	0.5	0.7	1.1
Fe (total)	0.07	0.03	0.00
Calcium mg/l	9.0	14.0	21
Sulfide mg/l	0.0	12.0	7.0
Potassium mg/l	1.0	2.0	2.0

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(5) The quantity of the discharge.

Approximately 200,000 gallons of storm water may be discharged from SWIC Pond A to SWIC Ponds 1 and 2 and/or directly to the environment.

Approximately 600,000 gallons of storm water will be pumped from SWIC Ponds 1 and 2, and dispersed to the environment adjacent to these facilities for beneficial use of the water by the environment. Approximately 800,000 gallons of storm water will be managed by these activities.

If you have any questions regarding this notification, please contact Mr. Jody Plum at (505) 234-7462.

Sincerely,

Inés Triay
for *Inés Triay*
Inés Triay
Acting Manager

cc:

M. Leavitt, NMED

J. Bearzi, NMED *ED

S. Zappe, NMED ED

T. Klein, NMED-AIP ED

D. Pepe, NMED-AIP

CBFO M&RC

*ED denotes Electronic Distribution