

1R - 266

APPROVALS

YEAR(S):



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop
Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

January 13, 2003

CERTIFIED MAIL

RETURN RECEIPT NO. 7001-1940-0004-3929-7112

Mr. Larry Sugano
Tipperary Corporation
633 Seventeenth St., Suite 1550
Denver, Colorado 80202

**RE: CASE #1R0266
SATELLITE #4 PIT CLOSURE
LEA COUNTY, NEW MEXICO**

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has reviewed Tipperary Corporation's (TC) February 26, 2002 "PIT REMEDIATION AND CLOSURE REPORT, SATELLITE #4, SECTION 12J-T11S-R33E, LEA COUNTY, NM". This document contains the results of the remediation of soils and ground water contamination related to former oilfield production pits at TC's Satellite #4 site located in Unit I, Section 12, Township 11 South, Range 33 East, Lea County, New Mexico. The document also requests final closure of the site remedial actions.

The above referenced closure request for TC's Satellite #4 site is approved. Please be advised that OCD approval does not relieve TC of responsibility should remaining contamination pose a future threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve TC of responsibility for compliance with any other applicable federal, state or local laws and regulations.

If you have any questions, please call me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Mike Griffin, Whole Earth Environmental, Inc.

Olson, William

From: Olson, William
Sent: Monday, March 04, 2002 9:59 AM
To: 'Mike Griffin'
Cc: Johnson, Larry; Sheeley, Paul
Subject: RE: Tipperary Bagley Field

The below-referenced extension request is approved. If you have any questions, please contact me.

Sincerely,

William C. Olson
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
(505) 476-3491

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-----Original Message-----
From: Mike Griffin [mailto:whearth@iamerica.net]
Sent: Thursday, February 28, 2002 7:47 AM
To: bill olson
Cc: larry sugano
Subject: Tipperary Bagley Field

Bill:

We are now preparing the field platmaps showing both contours and the proposed location of the new wells. It should be ready early next week. Could you please extend our deadline to March 15?

Mike Griffin

Olson, William

From: Olson, William
Sent: Tuesday, January 22, 2002 9:58 AM
To: 'Mike @ Whole Earth'
Subject: RE: November 2nd Instruction Letter



William Olson

The attached sampling results for the Iva Com #1 and Satellite #4 sites are acceptable for demonstrating containment of the ground water plumes and the OCD rescinds the November 2, 2001 requirement for additional monitoring wells at these sites.

The OCD's November 2, 2001 requirement for additional monitoring wells at the Bell State "A" is necessary because there are no ground water monitoring wells downgradient of monitor well MW-14 which has been well above New Mexico Water Quality Control Commission standards for benzene for a period of time. Therefore, the OCD continues to require that additional monitoring wells be placed at this site to completely define the extent of contamination as specified in the OCD's November 2, 2001 correspondence.

If you have any questions please contact me at (505) 476-3491.

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

From: Mike @ Whole Earth [mailto:whearth@iamerica.net]
Sent: Monday, November 19, 2001 6:52 AM
To: Bill Olson
Cc: Larry Sugano
Subject: November 2nd Instruction Letter

Bill:

We are in receipt of your letter of November 2nd regarding the need to establish the lateral delineation of eight sites within the Tatum Pit Closure Project.

I've researched our findings and agree that five sites do need additional information to be submitted. We've one additional year's worth of information now on its way to you that we believe will demonstrate that we've adequately identified the down-gradient spread of three of the sites described as follows:

Iva COM (Case # 1R263) The attached spread sheets for monitor wells 1 & 2 show four quarters in which the outlying wells have criteria contaminant concentrations within NMWQCC standards.

Bell State "A" (Case # 1R260) The attached spread sheet for monitor well # 25 (the furthest from the pit center) shows nine consecutive quarters with acceptable results.

Satellite 4 (Case # 1R266) The attached spread sheet for monitor well # 25 the furthest from the pit center) shows five consecutive quarters with acceptable results. We were going to submit a final closure on this site after the January 2002 sampling round.

We are preparing the work plan you requested and will have it out shortly after we know if these three sites must be included.

Olson, William

From: Mike @ Whole Earth [whearth@iAmerica.net]
Sent: Monday, November 19, 2001 6:52 AM
To: Bill Olson
Cc: Larry Sugano
Subject: November 2nd Instruction Letter



MW # 1.xls



MW # 2.xls



MW 25.xls



MW # 24.xls

Bill:

We are in receipt of your letter of November 2nd regarding the need to establish the lateral delineation of eight sites within the Tatum Pit Closure Project.

I've researched our findings and agree that five sites do need additional information to be submitted. We've one additional year's worth of information now on its way to you that we believe will demonstrate that we've adequately identified the down-gradient spread of three of the sites described as follows:

Iva COM (Case # 1R263) The attached spread sheets for monitor wells 1 & 2 show four quarters in which the outlying wells have criteria contaminant concentrations within NMWQCC standards.

Bell State "A" (Case # 1R260) The attached spread sheet for monitor well # 25 (the furthest from the pit center) shows nine consecutive quarters with acceptable results.

Satellite 4 (Case # 1R266) The attached spread sheet for monitor well # 25²⁴ the furthest from the pit center) shows five consecutive quarters with acceptable results. We were going to submit a final closure on this site after the January 2002 sampling round.

We are preparing the work plan you requested and will have it out shortly after we know if these three sites must be included.

Thanks in advance,

Mike Griffin

Monitor Well # 24
Satellite # 4
Sampling Results

Lab. #	12/28	13/93	14046	14678	15612	16594	20627	22778	25145	28433	31502	36157	38948	0101058-32	0101640-03
Sample Date	10/2/1997	12/3/1997	3/23/1998	6/25/1998	10/1/1998	1/6/1999	10/6/1999	1/8/2000	4/13/2000	7/20/2000	9/26/2000	1/5/2001	4/5/2001	7/7/2001	9/26/2001
Benzene	0.001	0.017	0.001	0.003	0.002	0.004	0.011	0.016	0.041	0.046	0.009	0.004	0.001	0.001	0.001
Toluene	0.001	0.006	0.001	0.003	0.001	0.003	0.011	0.030	0.041	0.046	0.005	0.004	0.001	0.001	0.001
Ethylbenzene	0.001	0.005	0.001	0.002	0.001	0.001	0.006	0.016	0.012	0.018	0.003	0.002	0.001	0.001	0.001
m,p Xylene	0.002	0.025	0.003	0.003	0.002	0.002	0.021	0.071	0.043	0.083	0.012	0.008	0.001	0.001	0.001
o Xylene	0.001	0.011	0.003	0.012	0.003	0.001	0.012	0.030	0.022	0.041	0.007	0.005	0.005	0.005	0.005
Total Xylene	0.003	0.036	0.001	0.003	0.001	0.001	0.012	0.090	0.022	0.041	0.007	0.005	0.005	0.005	0.005
Total BTEX	0.006	0.064	0.072	0.026	0.001	0.001	0.012	0.090	0.022	0.041	0.007	0.005	0.005	0.005	0.005



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenberg

Director

Oil Conservation Division

November 2, 2001

CERTIFIED MAIL

RETURN RECEIPT NO. 5357-8024

Mr. Larry Sugano
Tipperary Corporation
633 Seventeenth St., Suite 1550
Denver, Colorado 80202

**RE: TATUM PIT CLOSURE PROJECT
LEA COUNTY, NEW MEXICO**

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has completed a review of Tipperary Corporation's (TC) April 19, 2001 correspondence, December 7, 2000 "PROGRESS REPORT FOR YEAR 2000, TATUM PIT CLOSURE PROJECT, LEA COUNTY, NEW MEXICO" and November 29, 1999 "JULY 1999 PROGRESS REPORT, OCTOBER 1999 PROGRESS REPORT, TATUM PIT CLOSURE PROJECT, LEA COUNTY, NEW MEXICO". These documents contain the results of monitoring of ground water contamination related to the closure of unlined pits west of Tatum, New Mexico during the prior 2 years.

The remediation and monitoring actions conducted to date are satisfactory. However, a review of the monitoring data shows that the downgradient extent of ground water contamination at the following sites has not been determined:

- Bell State "A" (Case #1R260)
- Gulf State #1 (Case #1R262)
- Iva Com #1 (Case #1R263)
- Mabel Com #1 (Case #1R264)
- Satellite #4 (Case #1R266)
- Sohio State #1 (Case # 1R267)
- Sohio State "A" (Case #1R268)
- State NBF #1 (Case #1R269)

Larry G. Sugano
November 2, 2001
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Therefore, the OCD requires that TC submit a work plan to complete the investigation of the extent of contamination at these sites. The work plan shall be submitted to the OCD Santa Fe Office by December 7, 2001 with copy provided to the OCD Hobbs District Office and shall include:

1. A contoured ground water potentiometric map of each site showing proposed monitor well locations and the location of the former pit, excavated areas, existing monitor wells and other relevant site information.
2. Proposed monitor well construction details.
3. A proposed ground water sampling plan.
4. A schedule for implementation of the plan and submission of an investigation report.

If you have any questions, please call me at (505) 476-3491.

Sincerely,



William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Mike Griffin, Whole Earth Environmental, Inc.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

January 15, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-592

Mr. Larry Sugano
Tipperary Corporation
633 Seventeenth St., Suite 1550
Denver, Colorado 80202

**RE: TATUM PIT CLOSURES
LEA COUNTY, NEW MEXICO**

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has reviewed Tipperary Corporation's (TC) September 8, 1998 "WORK PLAN & 6/98 PROGRESS REPORT, TATUM PIT CLOSURE PROJECT, LEA COUNTY, NEW MEXICO". This document contains the results of TC's monitoring of ground water contamination related to the closure of 10 unlined pits west of Tatum, New Mexico. The document also contains TC's work plan for additional investigations through installation of monitor wells and ground water sampling.

The above referenced work plan is approved with the following conditions:

1. A sufficient number of monitor wells will be installed to determine the downgradient and lateral extent of ground water contamination at each site with either downgradient monitor wells which show ground water contamination in excess of standards or with evidence of contaminants migrating as a slug through the monitoring system.
2. Each monitor well will be constructed and completed as follows:
 - a. A minimum of 15 feet of well screen will be installed with 5 feet of well screen placed above the water table and 10 feet of well screen placed below the water table.
 - b. An appropriately sized gravel pack will be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.


- c. A 2-3 foot bentonite plug will be placed above the gravel pack.
 - d. The remainder of the hole will be grouted to the surface with cement containing 3-5% bentonite.
 - e. A concrete pad and locking well cover will be placed at the surface.
 - f. The well will be developed after construction using EPA approved procedures.
3. No less than 48 hours after the wells are developed, ground water from all monitor wells at each site will be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene (BTEX) major cations and anions, total dissolved solids (TDS), and New Mexico Water Quality Control Commission (WQCC) metals using EPA approved methods and quality assurance/quality control (QA/QC).
4. All wastes generated during the investigation will be disposed of at an OCD approved facility.
5. TC will submit a report on the investigations to the OCD by April 1, 1999. The report will be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office. The report will present the investigation work for each site as a separate case report. Each case report will contain the following information:
- a. A description of the investigation activities which occurred including conclusions and recommendations.
 - b. A geologic/lithologic log and well completion diagram for each monitor well.
 - c. A water table map showing the location of the pit, monitor wells, recovery wells and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient created using the water table elevation from each monitor well.
 - d. Summary tables of all past and present ground water quality sampling results and copies of all recent laboratory analytical data sheets and associated QA/QC data.
 - e. If ground water recovery is occurring at the site, the volume of ground water and volume of product recovered to date.
 - f. The disposition of all wastes generated.

Mr. Larry G. Sugano
January 15, 1999
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Please be advised that OCD approval does not limit TC to the proposed work if the plan fails to adequately determine the extent of contamination or if contamination exists which is outside the scope of the plan. In addition, OCD approval does not relieve TC of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

A handwritten signature in dark ink, appearing to read 'William C. Olson', written in a cursive style.

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Mike Matush, NM State Land Office
Mike Griffin, Whole Earth Environmental, Inc.