

AP - 32

APPROVALS

YEAR(S):

2003 - 2000



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Lori Wrotenberg

Director

Oil Conservation Division

June 11, 2003

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

**RE: ABATEMENT PLAN AP-32
COLLIER #1 PIT SITE
LEA COUNTY, NEW MEXICO**

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has completed a review of Tipperary Corporation's (TC) April 10, 2003 correspondence and June 28, 2003 "ABATEMENT PLAN, COLLIER #1 PIT, SECTION 9F-T11S-R33E, LEA COUNTY, NM". These documents contain TC's Stage 1 Abatement Plan Proposal and proof of public notice for investigation of ground water contamination related to former unlined pit at TC's Collier #1 site located in Unit F of Section 9, Township 11 South, Range 33 East, Lea County, New Mexico.

The Stage 1 Abatement Plan for investigation of the extent of ground water contamination at TC's Collier #1 site, as contained in the above-referenced documents, is approved with the following conditions:

1. Proposed monitor wells MW-35 and MW-36 shall be constructed as follows:
 - a. Twenty (20) feet of well screen shall be installed across the top of the water table with at least five feet of the well screen above the water table interface.
 - b. An appropriate gravel pack shall be placed around the well screen from the base of the hole up to 2-3 feet above the top of the well screen.
 - c. A 3 foot bentonite plug shall be placed on top of the gravel pack.
 - d. The remainder of the borehole annulus shall be grouted from the bentonite plug to the surface with a cement grout containing 3-5% bentonite.
 - e. A concrete pad and locking well cover shall be installed at the surface.

2. Proposed deep monitoring well MW-37 shall be constructed as follows:
 - a. Ten (10) feet of well screen shall be installed at the base of the aquifer.
 - b. An appropriate gravel pack shall be placed around the well screen from the base of the hole up to 2-3 feet above the top of the well screen.
 - c. A 3 foot bentonite plug shall be placed on top of the gravel pack.
 - d. The remainder of the borehole annulus shall be grouted from the bentonite plug to the surface with a cement grout containing 3-5% bentonite.
 - e. A concrete pad and locking well cover shall be installed at the surface.
3. All monitor wells shall be developed upon completion using EPA approved procedures.
4. All monitoring wells will have their locations surveyed.
5. No less than 24 hours well development, ground water from all monitor wells shall be purged, sampled and analyzed for concentrations of BTEX (benzene, toluene, ethylbenzene and xylene), total dissolved solids (TDS) and major cations and anions using EPA approved methods and quality assurance/quality control (QA/QC) procedures.
6. All wastes generated shall be disposed of at an OCD approved facility or in an OCD approved manner.
7. A Stage 1 investigation report containing the results of all site investigation and monitoring activities shall be submitted to the OCD Santa Fe Office by August 11, 2003 with a copy provided to the OCD Hobbs District Office. The report shall contain:
 - a. A description of all soil and ground water investigation and monitoring activities.
 - b. An inventory of water wells within one mile of the site.
 - c. Geologic/lithologic logs and well construction logs for the monitor wells.
 - d. A water table potentiometric contour map showing the location of pipelines, excavations, spills, monitoring wells, recovery wells, and any other pertinent site features, as well as, the direction and magnitude of the hydraulic gradient.
 - e. Isopleth maps for contaminants of concern.
 - f. Summary tables of all past and present ground water quality monitoring results including copies of all recent laboratory analytical data sheets and associated QA/QC data.

g. The disposition of all wastes generated.

8. TC shall notify the OCD at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not relieve TC of responsibility if the plan fails to adequately determine the extent of contamination related to TC's activities. 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 contact Bill Olson at (505) 476-3491.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger C. Anderson", with a long horizontal flourish extending to the right.

Roger C. Anderson
Environmental Bureau Chief

RCA/wco

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



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

June 5, 2001

CERTIFIED MAIL

RETURN RECEIPT NO. 3771-7330

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

**RE: CASE #1R0261
COLLIER #1 PIT CLOSURE
LEA COUNTY, NEW MEXICO**

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has reviewed Tipperary Corporation's (TC) January 11, 2001 "COLLIER #1 PIT CLOSURE, SECTION 9F-T11S-R33E, LEA COUNTY, NM". This document contains the results of TC's closure of a former unlined pit at the Collier #1 site located in Unit F, Section 9, Township 11 South, Range 33 East, Lea County, New Mexico. The document also contains TC's work plan for additional investigation of the extent of contamination through installation of a ground water monitoring well and ground water sampling.

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

1. The monitor well shall be installed southeast and directly adjacent to the former pit area.
2. TC shall construct the monitor well as follows:
 - a. A minimum of 15 feet of well screen shall 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 shall 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.

Mr. Larry G. Sugano
June 5, 2001
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- c. A 2-3 foot bentonite plug shall be placed above the gravel pack.
 - d. The remainder of the hole shall be grouted to the surface with cement containing 3-5% bentonite.
 - e. A concrete pad and locking well cover shall be placed at the surface.
 - f. The well shall be developed after construction using EPA approved procedures.
3. No less than 24 hours after the wells are developed, ground water from all monitor wells at each site shall be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene (BTEX) major cations and anions, and total dissolved solids (TDS), using EPA approved methods and quality assurance/quality control (QA/QC).
4. All wastes generated during the investigation shall be disposed of at an OCD approved facility.
5. TC shall submit a report on the investigations to the OCD by August 5, 2001. The report shall be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office. The report shall 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 the monitor well.
 - c. A map showing the location of the pit, monitor well and any other pertinent site features.
 - d. Summary tables of all ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data.
 - e. The disposition of all wastes generated.

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.

Mr. Larry G. Sugano

June 5, 2001

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

Sincerely,

A handwritten signature in black 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 Griffin, Whole Earth Environmental, Inc.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

November 22, 2000

CERTIFIED MAIL

RETURN RECEIPT NO. 5051-3860

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

**RE: COLLIER #1 PIT CLOSURE
LEA COUNTY, NEW MEXICO**

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has reviewed Tipperary Corporation's (TC) November 17, 2000 email titled "TIPPERARY COLLIER #1 REVISED PROTOCOL" which was submitted on behalf of TC by their consultant Whole Earth Environmental. This document contains TC's work plan for closure of a former unlined pit at the Collier #1 site west of Tatum, New Mexico.

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

1. All soil samples will be obtained and analyzed for concentrations of chloride, benzene, toluene, ethylbenzene, xylene and total petroleum hydrocarbons (TPH) using EPA approved methods and quality assurance/quality control (QA/QC) procedures.
2. Soils in excess of 250 mg/l chloride will not be placed back into the excavated area unless TC can demonstrate that chlorides will not pose a future threat to ground water, surface water, human health or the environment.
3. TC shall obtain a soil sample for every 100 yards of blended soils to confirm that the blended soils have achieved appropriate chloride, benzene, toluene, ethylbenzene, xylene and TPH remediation levels.
4. TC shall determine the vertical extent of chloride, benzene, toluene, ethylbenzene, xylene and TPH contamination related to the pit.

Larry G. Sugano
November 22, 2000
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5. TC will submit the report on the investigations to the OCD by January 19, 2001. The report will be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office.
6. TC shall notify the OCD at least 24 hours in advance of all scheduled activities and such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not limit TC to the proposed work if the plan fails to adequately remediate or determine the extent of contamination related to TC's activities, 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,



William C. Olson
Hydrologist
Environmental Bureau

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