# WIPP ACO 120614 Penalty Calculations Worksheets

### Violation # 1

Facility: Waste Isolation Pilot Plant

Date violation observed: March 13, 2014, date of AIB Fire Report release

Citation/Violation:The Permittees' failure to maintain and operate WIPP to minimize the possibility of a fire which could threaten human health or the environment is a violation of Permit Condition 2.1, Design and Operation of the Facility, and 20.4.1.500 NMAC, incorporating 40 CFR § 264.31.

#### Location: WIPP facility PENALTY AMOUNT: Gravity based penalty from matrix **.....** \$ 10,000 Potential for harm ..... major Extent of deviation (b) ..... major Number of counts 12 (c) ..... 2. Multiple count adjustment (multiply line 1 by counts) ......\$ 120,000 3a Multiday penalty from matrix .....\$ 5.000 Days of noncompliance (or other appropriate number) 3b 60 3c Multiday adjustment (multiply line 3b minus 1 by line 3a) ...... \$ 295,000 Multiday penalty from matrix 4a 4b Days of noncompliance (or other appropriate number) 0 4c Multiday adjustment (multiply line 4b by line 4a) .....\$ 5a Multiday penalty from matrix ..... 5b Days of noncompliance (or other appropriate number) 0 5c Multiday adjustment (multiply line 5b by line 5a) .....\$ Add lines 2, 3c, 4c, and 5c.....\$ 6. 415,000 7. Percent increase/decrease for good faith ..... 5% 8. Percent increase for willfulness/negligence 15% ..... 9. Percent increase for history of noncompliance 5% 10. Total percentage (add lines 7 through 9) ..... 25% 11. .....\$ 103,750 Multiply line 6 by line 10 12. Economic benefit penalty ..... 13. Add lines 6, 11, and 12 for total .....\$ penalty amount for this violation 518,750

Facility: Waste Isolation Pilot Plant

Date violation observed: February 19, 2014, five days after fire.

Citation/Violation: The Respondents' failure to submit a written notice concerning the fire within five calendar days of the time the Respondents became aware of the circumstances is a violation of Permit Condition 1.7.13.3, Written Notice, and 20.4.1.900 NMAC, incorporating 40 CFR § 270.30(l)(6)(iii)); and 1.7.13.2, Description of Occurrence; 20.4.1.900 NMAC, incorporating 40 CFR §270.30(l)(6)(ii.).

Loca	tion: NA	
PEN.	ALTY AMOUNT:	
1.	Gravity based penalty from matrix	\$ 10,000
	<ul><li>(a) Potential for harm</li><li>(b) Extent of deviation</li><li>(c) Number of counts</li></ul>	major major 1
2.	Multiple count adjustment (multiply line 1 by counts)	\$ 10,000
3a 3b 3c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 3b minus 1 by line 3a)	5,000 60 295,000
4a 4b 4c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 4b by line 4a)	\$ 0
5a 5b 5c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5a)	0
6.	Add lines 2, 3c, 4c, and 5c	\$ 305,000
7.	Percent increase/decrease for good faith	5%
8.	Percent increase for willfulness/negligence	15%
9.	Percent increase for history of noncompliance	5%
10.	Total percentage (add lines 7 through 9)	25%
11.	Multiply line 6 by line 10	\$ 76,250
12.	Economic benefit penalty	
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$ 381,250

Facility: Waste Isolation Pilot Plant

Date violation observed: March 13, 2014, AIB Fire Report release date

Citation/Violation: The Respondents' failure to conduct adequate personnel training is a violation of Permit Condition 2.8, Personnel Training; 2.8.2, Personnel Training Requirements, referencing 20.4.1.500 NMAC, incorporating 40 CFR § 264.16; and F-1e, Training for Emergency Response.

PEN	ALTY AMOUNT:	
1.	Gravity based penalty from matrix	\$ 5,000
	(a) Potential for harm	moderate
	(b) Extent of deviation	moderate
	(c) Number of counts	1
2.	Multiple count adjustment (multiply line 1 by counts)	\$ 5,000
3a	Multiday penalty from matrix	2,000
3b	Days of noncompliance (or other appropriate number)	60
3c	Multiday adjustment (multiply line 3b minus 1 by line 3a)	\$ 118,000
4a	Multiday penalty from matrix	
4b	Days of noncompliance (or other appropriate number)	0
4c	Multiday adjustment (multiply line 4b by line 4a)	\$ -
5a	Multiday penalty from matrix	
5b	Days of noncompliance (or other appropriate number)	0
5c	Multiday adjustment (multiply line 5b by line 5a)	\$ -
6.	Add lines 2, 3c, 4c, and 5c	\$ 123,000
7.	Percent increase/decrease for good faith	5%
8.	Percent increase for willfulness/negligence	15%
9.	Percent increase for history of noncompliance	5%
10.	Total percentage (add lines 7 through 9)	25%
11.	Multiply line 6 by line 10	\$ 30,750
12.	Economic benefit penalty	
13.	Add lines 6, 11, and 12 for total	
10.	penalty amount for this violation	\$ 153,750

Facility: Waste Isolation Pilot Plant

Date violation observed: March 13, 2014, AIB Fire Report release date

Citation/Violation: The Permittees' failure to have an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel is a violation of Permit Conditions: 2.10.1, Required Equipment; and 2.10.1.1, Internal Communications, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.32(a). (Associated applicable requirement - 40 C.F.R. § 264.32)

Location: WIPP underground

<u>PEN.</u> 1.	ALTY AMOUNT: Gravity based penalty from matrix	\$ 9,000
1.	(a) Potential for harm (b) Extent of deviation (c) Number of counts	major moderate
2.	Multiple count adjustment (multiply line 1 by counts)	\$ 126,000
3a 3b 3c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 3b minus 1 by line 3a)	4,500 60 265,500
4a 4b 4c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 4b by line 4a)	0
5a 5b 5c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5a)	0
6.	Add lines 2, 3c, 4c, and 5c	\$ 391,500
7.	Percent increase/decrease for good faith	5%
8.	Percent increase for willfulness/negligence	15%
9.	Percent increase for history of noncompliance	5%
10.	Total percentage (add lines 7 through 9)	25%
11.	Multiply line 6 by line 10	\$ 97,875
12.	Economic benefit penalty	
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$ 489,375

Facility: Waste Isolation Pilot Plant

Date violation observed: March 13, 2014, AIB Fire Report release date

Citation/Violation: The Permittees' failure to test and maintain the equipment specified in Permit Section 2.10.1, as necessary, to assure its proper operation in time of emergency, as specified in Permit Attachment E is a violation of Permit Conditions: 2.10.2, Testing and Maintenance of Equipment; and E-1a, General Inspection Requirements, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.33. (Associated applicable requirement - 40 C.F.R. § 264.15(b)(4))

Location: WIPP underground

	ALTY AMOUNT:	Ф	0.000
1.	Gravity based penalty from matrix  (a) Potential for harm  (b) Extent of deviation  (c) Number of counts		9,000 major moderate 43
2.	Multiple count adjustment (multiply line 1 by counts)	\$	387,000
3a 3b 3c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 3b minus 1 by line 3a)		4,500 60 265,500
4a 4b 4c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 4b by line 4a)		0
5a 5b 5c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5a)		0
6.	Add lines 2, 3c, 4c, and 5c	\$	652,500
7.	Percent increase/decrease for good faith		5%
8.	Percent increase for willfulness/negligence		15%
9.	Percent increase for history of noncompliance		5%
10.	Total percentage (add lines 7 through 9)		25%
11.	Multiply line 6 by line 10	\$	163,125
12.	Economic benefit penalty		
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$	815,625

Facility: Waste Isolation Pilot Plant

Date violation observed: April 11, 2014

Citation/Violation: The Permittees' failure to immediately implement the Contingency Plan as specified in Permit Attachment D when there was a fire that threatened human health or the environment is a violation of Permit Conditions: 2.12.1, Implementation of [Contingency] Plan, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.51(b); D-3, Implementation, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.51(b); and D-4a(1), Initial Emergency Response and Alerting the RCRA Emergency Coordinator.

PEN.	ALTY AMOUNT:	
1.	Gravity based penalty from matrix	\$ 10,000
	<ul><li>(a) Potential for harm</li><li>(b) Extent of deviation</li><li>(c) Number of counts</li></ul>	major major 1
2.	Multiple count adjustment (multiply line 1 by counts)	\$ 10,000
3a 3b 3c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 3b minus 1 by line 3a)	5,000 60 295,000
4a 4b 4c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 4b by line 4a)	0
5a 5b 5c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5a)	0
6.	Add lines 2, 3c, 4c, and 5c.	\$ 305,000
7.	Percent increase/decrease for good faith	5%
8.	Percent increase for willfulness/negligence	15%
9.	Percent increase for history of noncompliance	5%
10.	Total percentage (add lines 7 through 9)	25%
11.	Multiply line 6 by line 10	\$ 76,250
12.	Economic benefit penalty	
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$ 381,250

Facility: Waste Isolation Pilot Plant

Date violation observed: April 22, 2014, AIB Radiological Phase I Report release date

Citation/Violation: The Respondents' failure to design, maintain, and operate the

Facility in a manner to minimize the possibility of a release to the atmosphere of TRU mixed

waste or mixed waste constituents and to prevent undue exposure of personnel to hazardous

waste is a violation of Permit Conditions: 2.1, Design and Operation of Facility, referencing

20.4.1.500 NMAC, incorporating 40 CFR §264.31; and 2.11, Hazards Prevention, referencing

20.4.1.900 NMAC, incorporating 40 C.F.R. § 270.14(b)(8).

PEN.	ALTY AMOUNT:	
1.	Gravity based penalty from matrix	\$ 10,000
	(a) Potential for harm	major
	<ul><li>(b) Extent of deviation</li><li>(c) Number of counts</li></ul>	major 5
		_
2.	Multiple count adjustment (multiply line 1 by counts)	\$ 50,000
3a	Multiday penalty from matrix	\$ 5,000
3b	Days of noncompliance (or other appropriate number)	60
3c	Multiday adjustment (multiply line 3b minus 1 by line 3a)	\$ 295,000
4a	Multiday penalty from matrix	
4b	Days of noncompliance (or other appropriate number)	0
4c	Multiday adjustment (multiply line 4b by line 4a)	\$ -
5a	Multiday penalty from matrix	
5b	Days of noncompliance (or other appropriate number)	0
5c	Multiday adjustment (multiply line 5b by line 5a)	\$ -
6.	Add lines 2, 3c, 4c, and 5c.	\$ 345,000
7.	Percent increase/decrease for good faith	5%
8.	Percent increase for willfulness/negligence	15%
9.	Percent increase for history of noncompliance	5%
10.	Total percentage (add lines 7 through 9)	25%
11.	Multiply line 6 by line 10	\$ 86,250
12.	Economic benefit penalty	
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$ 431,250

Facility: Waste Isolation Pilot Plant

Date violation observed: February 15, 2014, 24 hours after the radiological release

Citation/Violation: The Respondents' failure to provide oral notification to NMED within 24 hours of becoming aware of the Release is a violation of Permit Conditions: 1.7.13.1.ii, Oral Reporting, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(l)(6)(i); and 1.7.13.2, Description of Occurrence, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(l)(6)(ii).

	ALTY AMOUNT:	
1.	Gravity based penalty from matrix	10,000
	(a) Potential for harm (b) Extent of deviation	major major
	(c) Number of counts	1
2.	Multiple count adjustment (multiply line 1 by counts)	\$ 10,000
3a	Multiday penalty from matrix	\$ 5,000
3b	Days of noncompliance (or other appropriate number)	6
3c	Multiday adjustment (multiply line 3b minus 1 by line 3a)	\$ 25,000
4a	Multiday penalty from matrix	
4b	Days of noncompliance (or other appropriate number)	0
4c	Multiday adjustment (multiply line 4b by line 4a)	\$ -
5a	Multiday penalty from matrix	
5b	Days of noncompliance (or other appropriate number)	0
5c	Multiday adjustment (multiply line 5b by line 5a)	\$ -
6.	Add lines 2, 3c, 4c, and 5c.	\$ 35,000
7.	Percent increase/decrease for good faith	5%
8.	Percent increase for willfulness/negligence	15%
9.	Percent increase for history of noncompliance	5%
10.	Total percentage (add lines 7 through 9)	25%
11.	Multiply line 6 by line 10	\$ 8,750
12.	Economic benefit penalty	
13.	Add lines 6, 11, and 12 for total	
	penalty amount for this violation	\$ 43,750

Facility: Waste Isolation Pilot Plant

Date violation observed: February 19, 2014, 5 days after the radiological release

Citation/Violation: The Respondents' failure to submit a written notice regarding the Release within five (5) calendar days of the time the Permittees become aware of the circumstances is a violation of Permit Conditions: 1.7.13.3, Written Notice, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(1)(6)(iii); and 1.7.13.2, Description of Occurrence, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(1)(6)(ii).

PENA	ALTY AMOUNT:	
1.	Gravity based penalty from matrix	\$ 10,000
	<ul><li>(a) Potential for harm</li><li>(b) Extent of deviation</li><li>(c) Number of counts</li></ul>	major major 1
2.	Multiple count adjustment (multiply line 1 by counts)	\$ 10,000
3a 3b 3c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 3b minus 1 by line 3a)	5,000 60 295,000
4a 4b 4c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 4b by line 4a)	0
5a 5b 5c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5a)	\$ 0
6.	Add lines 2, 3c, 4c, and 5c.	\$ 305,000
7.	Percent increase/decrease for good faith	5%
8.	Percent increase for willfulness/negligence	15%
9.	Percent increase for history of noncompliance	5%
10.	Total percentage (add lines 7 through 9)	25%
11.	Multiply line 6 by line 10	\$ 76,250
12.	Economic benefit penalty	
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$ 381,250

Facility: Waste Isolation Pilot Plant

Date violation observed: April 11, 2014

Citation/Violation: The Respondents' failure to immediately implement the Contingency Plan as specified in Permit Attachment D when there was a release of TRU mixed or hazardous waste or hazardous waste constituents which could threaten human health or the environment is a violation of Permit Conditions: 2.12.1, Implementation of [Contingency] Plan, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R.§ 264.51(b); D-3, Implementation, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.51(b); and D-4a(1), Initial Emergency Response and Alerting the RCRA Emergency Coordinator.

PEN	ALTY AMOUNT:		
1.	Gravity based penalty from matrix	\$	10,000
	(a) Potential for harm		major
	(b) Extent of deviation		major
	(c) Number of counts		1
2.	Multiple count adjustment (multiply line 1 by counts)	\$	10,000
3a 3b	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)		5,000 56
3c	Multiday adjustment (multiply line 3b minus 1 by line 3a)		275,000
4a	Multiday penalty from matrix		
4b	Days of noncompliance (or other appropriate number)	Φ.	0
4c	Multiday adjustment (multiply line 4b by line 4a)	\$	-
5a	Multiday penalty from matrix		0
5b	Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5c)	¢	0
5c	Multiday adjustment (multiply line 5b by line 5a)		-
6.	Add lines 2, 3c, 4c, and 5c	\$	285,000
7.	Percent increase/decrease for good faith		5%
8.	Percent increase for willfulness/negligence		15%
9.	Percent increase for history of noncompliance		5%
10.	Total percentage (add lines 7 through 9)		25%
11.	Multiply line 6 by line 10	\$	71,250
12.	Economic benefit penalty		
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$	356,250

Facility: Waste Isolation Pilot Plant

Date violation observed: July 7, 2014

Citation/Violation: The Respondents' acceptance, management, storage, and disposal of 508
containers of ignitable wastes is a violation of Permit Conditions: B, (Part A Application); 2.9,
General Requirements for Handling Ignitable, Corrosive, Reactive, or Incompatible Wastes,
referencing 20.4.1.200 NMAC, incorporating 40 CFR §§261.21 and 261.22, and referencing
20.4.1.500 NMAC, incorporating 40 CFR, Part 264, Appendix V; 2.3.1., Waste Analysis Plan;
referencing 20.4.1.500 NMAC, incorporating 40 CFR §264.13; 2.3.3. Treatment, Storage, and
Disposal Facility Waste Acceptance Criteria (TSDF-WAC); 2.3.3.7. Ignitable, Corrosive, and
Reactive Wastes; 2.3.4, Permitted TRU Mixed Wastes; 3.2.1.3, Hazardous Waste Numbers;
C-1b, Waste Summary Category Groups and Hazardous Waste Accepted at the WIPP Facility; and
C-1c, Waste Prohibited at the WIPP Facility. (Associated applicable requirement - PC C1)

	ALTY AMOUNT:	_	
1.	Gravity based penalty from matrix  (a) Potential for harm		10,000 major
	(b) Extent of deviation		major
	(c) Number of counts		508
2.	Multiple count adjustment (multiply line 1 by counts)	\$	5,080,000
3a	Multiday penalty from matrix	\$	5,000
3b	Days of noncompliance (or other appropriate number)		60
3c	Multiday adjustment (multiply line 3b minus 1 by line 3a)	\$	295,000
4a	Multiday penalty from matrix		
4b	Days of noncompliance (or other appropriate number)		0
4c	Multiday adjustment (multiply line 4b by line 4a)	\$	-
5a	Multiday penalty from matrix		
5b	Days of noncompliance (or other appropriate number)		0
5c	Multiday adjustment (multiply line 5b by line 5a)	\$	-
6.	Add lines 2, 3c, 4c, and 5c	\$	5,375,000
7.	Percent increase/decrease for good faith		5%
8.	Percent increase for willfulness/negligence		15%
9.	Percent increase for history of noncompliance		5%
10.	Total percentage (add lines 7 through 9)		25%
11.	Multiply line 6 by line 10	\$	1,343,750
12.	Economic benefit penalty		
13.	Add lines 6, 11, and 12 for total		
	penalty amount for this violation	\$	6,718,750

Facility: Waste Isolation Pilot Plant

Date violation observed: July 30, 2014

Citation/Violation: The Respondents' acceptance, management, storage, and disposal of 503 containers of incompatible wastes is a violation of Permit Conditions: 2.9, General Requirements for Handling Ignitable, Corrosive, Reactive, or Incompatible Wastes, referencing 20.4.1.200 NMAC, incorporating 40 CFR §\$261.21 and 261.22, and referencing 20.4.1.500 NMAC, incorporating 40 CFR § 264, Appendix V; 2.3.1, Waste Analysis Plan, referencing 20.4.1.500 NMAC incorporating 40 CFR §264.13; 2.3.3, Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC); 2.3.3.4, Chemical Incompatibility; and C-1c, Waste Prohibited at the WIPP Facility. (Associated applicable requirement - PC C1)

_	ALTY AMOUNT:	Ф	10.000
1.	Gravity based penalty from matrix  (a) Potential for harm  (b) Extent of deviation  (c) Number of counts		10,000 major major 503
2.	Multiple count adjustment (multiply line 1 by counts)	\$	5,030,000
3a 3b 3c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 3b minus 1 by line 3a)		5,000 60 295,000
4a 4b 4c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 4b by line 4a)		0
5a 5b 5c	Multiday penalty from matrix  Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5a)		0
6.	Add lines 2, 3c, 4c, and 5c	\$	5,325,000
7.	Percent increase/decrease for good faith		5%
8.	Percent increase for willfulness/negligence		15%
9.	Percent increase for history of noncompliance		5%
10.	Total percentage (add lines 7 through 9)		25%
11.	Multiply line 6 by line 10	\$	1,331,250
12.	Economic benefit penalty		
13.	Add lines 6, 11, and 12 for total penalty amount for this violation	\$	6,656,250

Facility: Waste Isolation Pilot Plant

Date violation observed: July 7, 2014

Citation/Violation: The Respondents' failure to verify the completeness and accuracy of the Waste Stream Profile Form is a violation of Permit Condition C-5a(2), Examination of the Waste Stream Profile Form and Container Data Checks. (Associated applicable requirement - PC C1)

PENA	ALTY AMOUNT:		
1.	Gravity based penalty from matrix	\$	10,000
	(a) Potential for harm		major
	(b) Extent of deviation		major
	(c) Number of counts		4
2.	Multiple count adjustment (multiply line 1 by counts)	\$	40,000
3a	Multiday penalty from matrix	\$	5,000
3b	Days of noncompliance (or other appropriate number)		60
3c	Multiday adjustment (multiply line 3b minus 1 by line 3a)	\$	295,000
4a	Multiday penalty from matrix		
4a 4b	Days of noncompliance (or other appropriate number)		0
4c	Multiday adjustment (multiply line 4b by line 4a)	\$	-
		т	
5a 5b	Multiday penalty from matrix		0
50 50	Days of noncompliance (or other appropriate number)  Multiday adjustment (multiply line 5b by line 5a)	<b>\$</b>	U
30			-
6.	Add lines 2, 3c, 4c, and 5c	\$	335,000
7.	Percent increase/decrease for good faith		5%
8.	Percent increase for willfulness/negligence		15%
9.	Percent increase for history of noncompliance		5%
10.	Total percentage (add lines 7 through 9)		25%
11.	Multiply line 6 by line 10	\$	83,750
12.	Economic benefit penalty		
13.	Add lines 6, 11, and 12 for total		
	penalty amount for this violation	\$	418,750