



# *OnePlan Pesticide Application Recordkeeping*

Treasure Valley Irrigation Conference

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# What is OnePlan PAR?

- Easy to use way to keep required records
- Electronic and permanent record keeping
- Secure record keeping
- Records sorting features
- Site specific to each application

# OnePlan Pesticide Recordkeeping

- Safe and secure
  - Data on redundant servers and always backed up
  - Legislation protects OnePlan records - 2005 Idaho Code - 22-2718 states:

"To provide for the establishment and encouragement of the "Idaho OnePlan" as a primary computer-based conservation planning process for all natural resource concerns. Establishment and encouragement will be accomplished through an executive group and steering committee both containing private, state and federal representation. The information provided by those using the "Idaho OnePlan" shall be deemed to be trade secrets, production records or other proprietary information and shall be kept confidential and shall be exempt from disclosure pursuant to section 9-340D, Idaho Code."

[www.OnePlan.org/PAR](http://www.OnePlan.org/PAR)

- Computerized Web Application
  - Calculations made easy
  - Enter data once
  - Everything in one place
- Complete USDA/ISDA Records
  - WPS Requirements
  - RUP Application Records

## Idaho OnePlan



### Home

[Conservation planner](#)

[Conservation Funding Programs](#)

[Wildfire Management](#)

[Nutrient Management Plan](#)

[Pest Management](#)

[Pesticide Application Recordkeeping \(PAR\)](#)

[Animal Feeding Operations](#)

[Carbon Sequestration](#)

[Range Management](#)

[Farmstead](#)

[Organic Farming](#)

[Water](#)

[BMP/Conservation Practices](#)

[Reference](#)

## Helping Farmers Move into the Future

Idaho OnePlan provides data and software to help growers develop a single conservation farm plan that can be pre-endorsed by the various agencies, streamlining and simplifying the regulatory process that farmers face.

Idaho OnePlan is a multi-agency project to combine government regulations and current best management practices for agriculture into a single plan, integrating federal, state, and local regulations for:

- Nutrient, Pest and Waste Management
- Water Quality and Wetlands
- Air Quality
- Financial Assistance
- Endangered Species
- Petroleum Storage Tanks

## The OnePlan Vision: A Simple Concept

Farmers and agencies can both benefit from reducing duplication of effort, regulatory red tape and cross-agency bottlenecks. The OnePlan coordinates the various conservation requirements of the numerous agencies with regulatory and technical oversight. From the comfort of home or office, you can connect to site specific information tailored to Idaho growers.

"Clippings" of aerial photos, soil data, hydrology maps, roads, and borders on different GIS map layers are available. With this data and the OnePlan software questionnaire, growers can generate a report and plan of action—a conservation farm plan—with effective area-specific best management practices (BMPs). The software allows the grower to record management practices over time to see what works: specific activities such as pesticide application, cultivation methods, equipment, etc. can be tracked by field.

## Qualify for Financial Assistance

Farm Conservation Plans derived from the OnePlan method will help qualify farmers for local, state and federal financial assistance for conserving natural resources when needed and available. The OnePlan method makes conservation planning and implementation dramatically more efficient. Growers, technical experts, and the environment will all be winners.

## It's Free

Anyone can use the OnePlan software and develop an Idaho farm plan regardless of how he chooses to use the results. It's private information and it's entirely up to the individual whether or not to share such information; for example, to share it with agencies to aid in cost share or grant applications.

[www.OnePlan.org/PAR](http://www.OnePlan.org/PAR)

Go through one time set up process ...

- Applicator Name
- Address
- Applicators, License #, Phone



Fill in account information for this operation. (Items are required unless indicated otherwise.)

**Operator name:**   
**Company name:**  (optional)  
**Address:**   
**City:**  **State:**  **ZIP code:**   
**Telephone:**   
**Mobile phone:**   
**Your applicator license number:**  **and License type:**

Enter your  
Applicator's  
information

### Applicators for this operation

Optional: set up one or more Applicators. "NOTIFY" type provides for sending notices to non-applicators.

Applicator name	Lic. No.	State - Type	Telephone	Email address
Bruce Ard	205	ID - PROFESSIONAL	208 356-3601	bruceard@valleywidecoop.com
Casey	1234	ID - PRIVATE	208 431-1549	ccrowley@valleywidecoop.com
oneplan	12345	ID - PRIVATE	208 378-5700	wayne.newbill@gmail.com
Phil Shewmaker	44444	ID - PROFESSIONAL	208 880-8804	psshewmaker@valleywidecoop.com
Wayne Newbill	54321	ID - PRIVATE	208 888-5008	wayne.newbill@gmail.com
<input type="text"/>	<input type="text"/>	<input type="text" value="Select..."/>	<input type="text"/>	<input type="text"/>

# Map to Your Nearest Medical Facility

## Nearest Medical Facility

Select from the list:  or enter your own information.

Name:

Address:

City:

State:

ZIP code:

Telephone:

[Search the web for nearest facility](#)



# Locate and Describe each Field on Your Operation

Box will pop  
up asking  
for field  
name and  
acres



Field 2	Potato	08/15/2009	1/18/2011	Edit	In use
Field 2	Wheat, winter	07/1/2008	8/15/2009	Edit	In use
Field 2	Wheat, winter	07/1/2007	7/1/2008	Edit	In use
Field 2	Alfalfa, seed	07/1/2006	7/1/2007	Edit	Del
Field 2	Beans, seed or dry	09/1/2005	7/1/2006	Edit	Del
Field 3	Alfalfa	09/30/2010	Current	Edit	Del
Field 3	Alfalfa, grass mix	09/1/2008	9/30/2010	Edit	In use
Field 3	Beans, seed or dry	08/1/2007	7/1/2008	Edit	In use
Field 3	Wheat, winter	07/1/2006	8/1/2007	Edit	Del
Field 3	Alfalfa, seed	09/1/2005	7/1/2006	Edit	Del
Field 4	Potato	08/15/2010	Current	Edit	Del
Field 4	Wheat, winter	11/15/2009	8/15/2010	Edit	Del
Field 4	Potato	07/1/2008	11/15/2009	Edit	In use
Field 4	Wheat, winter	07/1/2007	7/1/2008	Edit	In use
Field 4	Alfalfa, seed	07/1/2006	7/1/2007	Edit	Del
Field 4	Alfalfa, seed	09/1/2005	7/1/2006	Edit	Del
Field 5	Potato	01/18/2011	Current	Edit	Del
Field 5	Potato	07/15/2009	1/18/2011	Edit	In use
Field 5	Wheat, winter	07/1/2008	7/15/2009	Edit	In use
Field 5	Wheat, winter	07/1/2007	7/1/2008	Edit	In use
Field 5	Beans, seed or dry	07/1/2006	7/1/2007	Edit	Del
Field 5	Wheat, winter	09/1/2005	7/1/2006	Edit	Del
Field 6	Wheat, winter	11/30/2010	Current	Edit	Del

Fill in crop history for each field

# Enter Information for each Pesticide You use...

Preharvest interval (PHI) and Resistance group are optional; all other inputs required.

Product name:	<input type="text" value="Endosulfan 3EC"/>		
EPA Registration No.:	<input type="text" value="19713-399"/>	Restricted use pesticide?	<input checked="" type="checkbox"/>
Active ingredient:	<input type="text" value="Endosulfan"/>		
Signal word:	<input type="text" value="Danger-Poison"/>	REI:	<input type="text" value="48 hr"/>
Resistance group:		PHI:	<input type="text" value="1"/> days

Complete label requirements for each pesticide

## Required Personal Protective Equipment (PPE)

### Mixing, loading, application

- ☐ Shoes, socks
  - ☒ Footwear, chemical resistant
- 
- ☐ Short-sleeve shirt, short pants
  - ☒ Long-sleeve shirt, long pants
- 
- ☒ Eyewear, protective
  - ☒ Gloves, chemical resistant
  - ☒ Apron, chemical resistant
  - ☒ Coveralls
  - ☒ Headgear, chemical resistant
  - ☒ Respirator, chemical/dust approved
  - ☐ Protective suit, chemical resistant

### Early re-entry

- ☒ Shoes, socks
  - ☐ Footwear, chemical resistant
- 
- ☐ Short-sleeve shirt, short pants
  - ☐ Long-sleeve shirt, long pants
- 
- ☒ Eyewear, protective
  - ☒ Gloves, chemical resistant
  - ☐ Apron, chemical resistant
  - ☒ Coveralls
  - ☐ Headgear, chemical resistant
  - ☐ Respirator, chemical/dust approved
  - ☐ Protective suit, chemical resistant

[IPM Home](#)

You are logged in  
as oneplan  
[Update](#) | [Logout](#)

[Help / instructions](#)

[Customize crops](#)

[Customize pests](#)

[Edit products](#)

[Edit adjuvants](#)

**Application  
workorders:**

[Initiate W.O.](#)

[W.O. report](#)

Edit:

In process:

Complete:

## Operation Summary



### Farm Operator

Bob Farmer  
OnePlan Farms  
123 Farmway Lane  
Farmington ID 83605  
208 888-8008 **Mobile:** 208 378-5700

[\(edit\)](#)

### Applicators

[\(edit\)](#)

Applicator Name	Lic. No.	Phone
Bruce Ard	205	208 356-3601
Casey	1234	208 431-1549
oneplan	12345	208 378-5700
Phil Shewmaker	44444	208 880-8804
Wayne Newbill	54321	208 888-5008

### Handlers

[\(edit\)](#)

Handler Name	Phone
Bob Jones	208 466-3052
Bob Jones	208 466-3052

### Farm Unit: Bob Farmer

[\(edit\)](#)

### Nearest Medical facility

West Valley Medical Center  
1717 Arlington Avenue  
Caldwell ID 83605  
208 454-3777  
[Map to Facility](#)

### Farm Unit Fields

[\(edit\)](#)

[\(edit crop history\)](#)

Field name	Current crop	PLS	Lat	Lon
Field 1	Alfalfa, seed	T4N R2W S20	43.66363	-116.60374
Field 10	Potato	T4N R2W S20	43.66791	-116.60188
Field 11	Alfalfa, seed	T4N R2W S20	43.66900	-116.61113
Field 12	Buckwheat	T4N R2W S19	43.66737	-116.61625

# Your Operation Summary Page

# Initiate a Work Order

## Enter Date and Time of Application

Workorder number: 1111280

### 1. Scheduled start, finish, and Applicator

Scheduled start:

Scheduled finish:

Applicator:

2. Specify Crop:

3. Specify Field:

4. Specify Type

Zone of application

Mode of application

◀

November 2011

▶

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Workorder number: 1111280

## 1. Scheduled start, finish, and Applicator

	Date	time
Scheduled start:	<input type="text" value="11/29/2011"/>	<input type="text" value="8:00 AM"/>
Scheduled finish:	<input type="text" value="11/29/2011"/>	<input type="text" value="12:00 PM"/>

Applicator:

2. Specify Crop:

3. Specify Field:

4. Specify Type

Select..

Bruce Ard

Casey

oneplan

Phil Shewmaker

Wayne Newbill

Select the  
applicator  
for this job

Specify the target crop from your drop down list

2. Specify Crop:

Potato

3. Specify Fields

Select...

Alfalfa, grass mix

Alfalfa, seed

Potato

Sugarbeet

Wheat, winter

4. Specify Type of

Zone of application

☒ Band ☐ Spot

Mode of application:

☒ Spray (liquid) ☐ Dry (granular)



Select the fields of that crop for this application

2. Specify Crop: Potato

3. Specify Fields

<input checked="" type="checkbox"/>	Field	Acres	Area to treat	Applic. area
<input checked="" type="checkbox"/>	Field 3	12	12	12.00
<input checked="" type="checkbox"/>	Field 10	13.93	13.93	13.93
			Total acres:	25.93

Select the type of application

#### 4. Specify Type of Application

Zone of application: ☒ Full coverage ☐ Band ☐ Spot

Mode of application: ☒ Spray (liquid) ☐ Dry (granular) ☐ Soil fumigation

☒ Mix per acre:  gal.

☐ Total mix:  gal.

## Specify your equipment and settings

### 5. Specify equipment and settings: (optional)

Tank capacity:  gal. Number of loads: 1.7

Nozzles/settings:

psi

Applicator equip.:

Equipment speed:  mph

## 6. Specify pests targeted by this application (optional):

Target pests	
Aphids	Delete
Select a pest...	Add

Select a pest...  
Weeds  
Aphids  
Cabbage looper  
Colorado Potato Beetle  
Potato Leafhopper  
Spider mite  
Tuberworms  
Wireworms  
Nematodes  
Bacterial Soft Rot  
Common Scab

ply: [\(edit Products\)](#)

Rate/acre		Total product		
	oz ▼		oz ▼	Add

clude: [\(edit adjuvants\)](#)

Rate/acre		Total adjuvant		
	oz ▼		oz ▼	Add

Select the target pests from your list

# Select the Pesticide products from your list

## 7. Specify Product(s) to apply: [\(edit Products\)](#)

Product name	Rate/acre	Total product		
Dimethoate 4EC	2.0 pt	11.28 gal	Edit	Del
Endosulfan 3EC	1.0 pt	5.64 gal	Edit	Del
Select a product...	<input type="text"/> fl oz ▼	<input type="text"/> fl oz ▼	Add	

Select a product...

638 Herbicide

Acramite

Admire 2F

Admire Pro

Agree

Agri-Mek

Apron

Asana

Assail 30 SG

Buctril 2EC

Carbaryl 4L

Carbaryl 4L

Comite

Di-Syston

Dibrom

Direx

## Specify Adjuvant(s) to include: [\(edit adjuvants\)](#)

	Rate/acre	Rate/100 gal	Total adjuvant		
	0.4 fl oz	2.0 fl oz	1.13 pt	Edit	Del
	0.2 fl oz	1.0 fl oz	9.03 fl oz	Edit	Del
	6.4 fl oz	2.0 pt	2.26 gal	Edit	Del
<input type="text"/>	<input type="text"/> fl oz ▼	<input type="text"/> fl oz ▼	<input type="text"/> fl oz ▼	Add	

Notes:

# Select the Adjuvants from your list

## 8. Specify adjuvant(s) to include: [\(edit adjuvants\)](#)

Adjuvant name	Rate/acre	Rate/100 gal	Total adjuvant		
Ballast	0.4 fl oz	2.0 fl oz	1.13 pt	Edit	Del
Fighter F	0.2 fl oz	1.0 fl oz	9.03 fl oz	Edit	Del
Class Act	6.4 fl oz	2.0 pt	2.26 gal	Edit	Del
Select an adjuvant...	<input type="text"/>	fl oz	<input type="text"/>	fl oz	<input type="text"/> Add

Select an adjuvant...

17% Concentrate

Activator 90

AMS

Class Act

Destiny

Dyne-Amic

Fast Break

Herbimax

UAN 32

es:

When required data are entered, [Review](#) the completed workorder before issuing.  
You can [Save](#) what you've entered and continue editing later, or [Discard](#) this entry.

# Review then Issue the Finished Work Order

**Applicator:** Wayne Newbill **Lic. no.** 54321

**Scheduled**

**Date:** Tue. November 29, 2011

**Start:** 8:00 AM

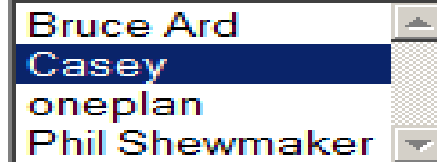
**Finish:** 12:00 PM

**Do not re-enter until 48 hrs after actual finish**

**Crop:** Potato

No target pests specified.

(Optional) Others to notify by email



(Ctrl-select for multiple)

Product name (Active ingredient)	EPA Reg.#	RU	Per acre	Total	Per 100 gal	Per tank
Dimethoate 4EC (dimethoate)	5905-493		2.0 pt	6.48 gal	1.25 gal	3.75 gal
Endosulfan 3EC (endosulfan)	19713-399	X	1.0 pt	3.24 gal	5.0 pt	1.88 gal

Adjuvant	Per acre	Total	Per 100 gal	Per tank
Ballast	0.4 fl oz	10.37 fl oz	2.0 fl oz	6.0 fl oz
Fighter F	0.2 fl oz	5.19 fl oz	1.0 fl oz	3.0 fl oz
Class Act	6.4 fl oz	1.3 gal	2.0 pt	6.0 pt

**Total mix required:** 519 gal

**Total number of loads required:** 1.73



# Finished Work Order

## Application Type and Equipment

**Zone:** Full coverage

**Mode:** Spray (liquid)

**Applicator Equipment:** Broadcast Sprayer

**Speed (mph):** 6

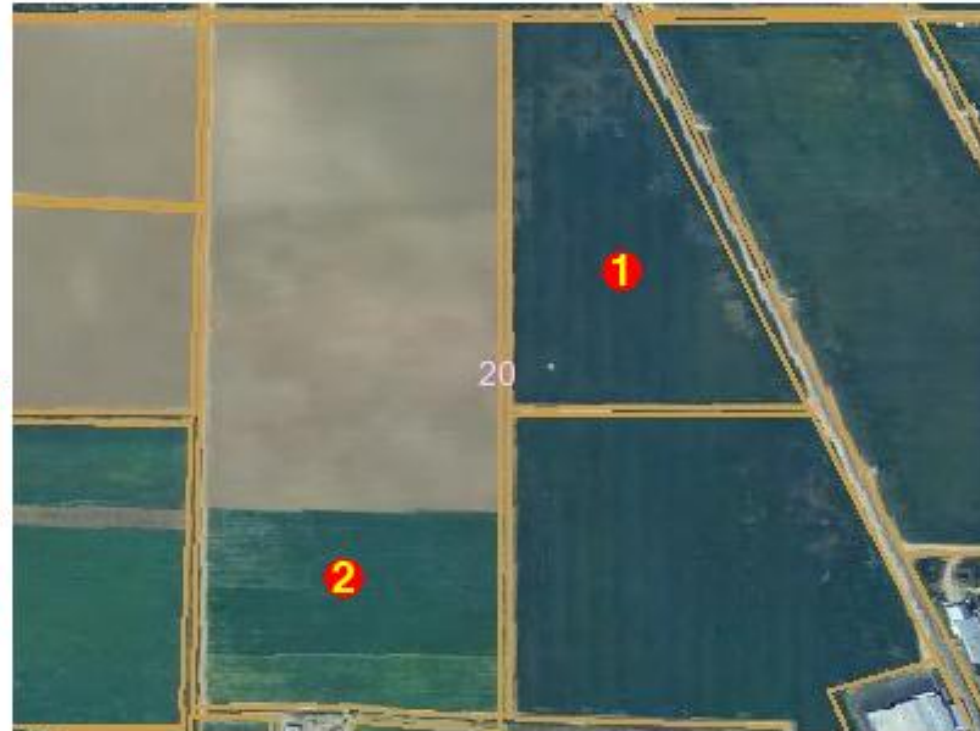
**Mix per acre (gal):** 20.0

**Tank capacity (gal):** 300

**Nozzles/settings:** 8004 Nozzles on 20 inch centers

**Nozzle pressure (psi):** 35

## Notes



## Application Site Information

**Wind speed:**  **Temperature:**

**Wind direction:**  **Rel. humidity:**

**Weather:**

**Soil condition:**

## Applicator notes

	Field	Acres	Area to treat	Applic. area	Lat/Lon
1	Field 10 T4N R2W S20	13.93	13.93	13.93	43.66791, -116.60188
2	Field 3 T4N R2W S20	12.0	12.0	12.0	43.66516, -116.60439
			<b>Total acres:</b>	25.93	

# Summarize the Application

Workorder number: 1011170

Issued: Wednesday November 17, 2010

Crop: Potato

## 1. Application start, finish, and Applicator

Specified

Actual

What did I actually do?

Start: Nov. 17, 2010 9:00 AM   ☒ AM ☐ PM

Finish: Nov. 17, 2010 1:00 PM   ☐ AM ☒ PM

Applicator: Wayne Newbill

▼

November 2010						
≤						≥
Su	Mo	Tu	We	Th	Fr	Sa
<u>31</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
<u>14</u>	<u>15</u>	<u>16</u>	<b><u>17</u></b>	<u>18</u>	<u>19</u>	<u>20</u>
<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>
<u>28</u>	<u>29</u>	<u>30</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>

## 2. Fields

Specified

Field	Area (ac)	Applic. area
Field 1	22.83	11.415
Field 2	30.67	15.335
Field 5	19.98	9.99
HQ2	16.78	8.39
Total acres:		45.13

Actual

<input checked="" type="checkbox"/>	Field	Area (ac)	Applic. area
<input checked="" type="checkbox"/>	Field 1	22.83	11.42
<input checked="" type="checkbox"/>	Field 2	30.67	15.34
<input checked="" type="checkbox"/>	Field 5	19.98	9.99
<input checked="" type="checkbox"/>	HQ2	16.78	8.39
	Total acres:		45.13

## 3. Type of Application

Specified

Zone: Band application

Actual

Zone of application: ☐ Full coverage ☒ Band ☐ Spot

Band width:  in. Row width:  in. O.C.

## Application Reports

[Home](#)

You are logged  
in as Wayne  
Newbill

[Operation summary](#)[Workorder reports](#)Product Application Records *Operator: Wayne Newbill*
☒ Show all ☐ Restricted Use only
Select by Farm Unit: 
 Select by year:  Select by field:  Select by crop: 

All application records for all farm units of the operation

Select..

Alfalfa, seed

Beans, seed or dry

Garden Beans

Potato

Sugarbeet

Wheat, winter

Date	W.O. Num.	Product	RU	EPA Reg. #	Rate/ac.	Total			Crop	Zone
7/17/2008	<a href="#">8071740</a>	Phorate 20G	<input checked="" type="checkbox"/>	2749-521	2.0 lb	45.66 lb			Wheat, winter	Full
7/31/2008	<a href="#">807310</a>	Admire Pro	<input type="checkbox"/>	264-827	6.0 oz	1.07 gal			Wheat, winter	Full
		Dimethoate 4EC	<input type="checkbox"/>	5905-493	2.0 pt	5.71 gal	Field 1	22.8	Wheat, winter	Full
7/17/2008	<a href="#">8071740</a>	Furadan	<input checked="" type="checkbox"/>	279-2876	1.75 pt	4.99 gal	Field 1	22.8	Wheat, winter	Full
8/1/2008	<a href="#">8071516</a>	Admire Pro	<input type="checkbox"/>	264-827	6.0 oz	1.07 gal	Field 1	22.8	Wheat, winter	Full
		Agri-Mek	<input checked="" type="checkbox"/>	100-898-618	4.0 oz	5.71 pt	Field 1	22.8	Wheat, winter	Full
		Furadan	<input checked="" type="checkbox"/>	279-2876	2.18 pt	6.21 gal	Field 1	22.8	Wheat, winter	Full
6/25/2008	<a href="#">806240</a>	Lannate SP	<input checked="" type="checkbox"/>	352-342	2.0 pt	5.71 gal	Field 1	22.8	Wheat, winter	Full
5/1/2008	<a href="#">806104</a>	Admire Pro	<input type="checkbox"/>	264-827	6.0 oz	1.71 pt	Field 1	4.6	Wheat, winter	Band
		Dimethoate 4EC	<input type="checkbox"/>	5905-493	2.18 pt	1.24 gal	Field 1	4.6	Wheat, winter	Band
6/25/2008	<a href="#">806240</a>	Dimethoate 4EC	<input type="checkbox"/>	5905-493	2.0 oz	2.85 pt	Field 1	22.8	Wheat, winter	Full
		Admire Pro	<input type="checkbox"/>	264-827	6.0 oz	1.07 gal	Field 1	22.8	Wheat, winter	Full
		Furadan	<input checked="" type="checkbox"/>	279-2876	2.0 pt	5.71 gal	Field 1	22.8	Wheat, winter	Full
		Torrent 2F	<input type="checkbox"/>	60063-31	1.0 pt	2.85 gal	Field 1	22.8	Wheat, winter	Full
5/1/2008	<a href="#">806104</a>	Admire Pro	<input type="checkbox"/>	264-827	6.0 oz	2.3 pt	Field 2	6.1	Wheat, winter	Band

Sort  
records by  
RUP; field;  
date; crop

# 2011 Evaluation

“What did you find most useful about the PAR program?”

- Simplicity
- I didn't feel that I was burdened entering my information. Knowing it wouldn't be time consuming and repetitive.
- Simple to use and very effective.
- I liked the ease of putting out the reports for the EPA. I like the idea of having back-up records. Helped with the GAP program.
- I don't like computers, but this program is made for dummies. Makes record keeping easy and complete.
- Great stuff

Currently have about 260 users



# Old OnePlan Mapping

## Zoomed to fullest extent

OnePlan Pesticide Application & Soil Fumigation Recordkeeping

Setup: [Operator/applicators](#) > [Handlers](#) > [Farm unit\(s\)](#) > [Map fields](#) > [Crop history](#)

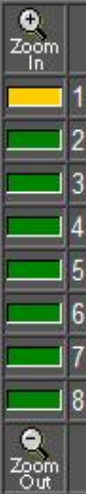
[Operation summary](#)

[Help / instructions](#)

[Map instructions](#)

Locate and describe fields for Farm Unit:  ▼

☐ Printable view



Add Field

Done Mapping

# New OnePlan Mapping from Google Maps

OnePlan Pesticide Application & Soil Fumigation Recordkeeping

Setup: [Operator/applicators](#) > [Handlers](#) > [Farm unit\(s\)](#) > [Map fields](#) > [Crop history](#)

[Op summary](#)

[Map instructions](#)

**Locate and describe fields**

☐ Printable view





# New OnePlan Mapping

## Zoomed in to fullest extent

OnePlan Pesticide Application & Soil Fumigation Recordkeeping

Setup: [Operator/applicators](#) > [Handlers](#) > [Farm unit\(s\)](#) > [Map fields](#) > [Crop history](#)

[Op summary](#)

[Map instructions](#)

Locate and describe fields

☐ Printable view







# *OnePlan Soil Fumigant Application Management Project*

Funded by EPA Region 10

Technical and staff support by:

- University of Idaho
- Idaho State Department of Agriculture
- Idaho Association of Soil Conservation Districts
- Washington State University
- Washington Department of Agriculture
- Oregon State University
- USDA/NRCS



## *Soil Fumigant Application Management*

- Soil Fumigant Management Plan will now be required before all applications
- All Soil Fumigant products are now Restricted Use
- Good Agricultural Practices (GAPs) are now mandatory
- Buffers and/or mitigating practices will be mandatory in 2012



## *Soil Fumigant Application Management Plan*

### **Must include:**

- Certified Applicator
- Name and Phone number
- License number:
  - ☐ Commercial applicator
  - ☐ Private applicator
- Employer name and address
- Date of completing registrant training program



## *Soil Fumigant Application Management Plan*

### **Must include:**

#### **General Site Information**

- Application block location, address, or global positioning system (GPS) coordinates:
- Name, address, and phone number of owner/operator of application block:

#### **General Application Information**

- Target application date/window:
- Brand name of fumigant:
- EPA Registration Number:



## *Soil Fumigant Application Management Plan*

### **Must include:**

#### **Soil Conditions**

- Description of soil texture, organic matter, and moisture in application block
- Description of method used to determine soil moisture level



## *Soil Fumigant Application Management Plan*

### **Must include:**

#### **Weather Conditions:**

- Weather forecast for the day of the application and the 48-hour period following the fumigant application (may attach a copy of printed forecast to FMP)
- Weather observations for the application period and the 48-hour period following the fumigant application



## *Soil Fumigant Application Management Plan*

**Must Include:**

**Buffer Zones in 2013**

Buffer sizes will be determined by:

- Application method
- Rate
- Block size





## *Soil Fumigant Application Management Plan*

### **Must include:**

#### **Personal Protective Equipment for Handlers**

- Handler Task Appropriate Clothing
- Respirator Type, Filter Cartridge
- Type and Change-out Schedule
- Eye Protection
- Protection Gloves
- Other



## *Soil Fumigant Application Management Plan*

### **Must include:**

#### **Emergency Response Plan**

- Description of evacuation routes
- Locations of telephones
- Contact information for first responders
- Other contact information for emergencies
- Emergency procedures/responsibilities in case of an incident, outside buffer zone suggesting potential problems, or other emergencies).



## *Soil Fumigant Application Management Plan*

**Must include:**

### **Posting Signs**

- Name and phone number of person that is doing posting
- Location of posting signs
- Procedures for posting and sign removal



## *Soil Fumigant Application Management Plan*

### **Must include:**

#### **Site Specific Response and Management**

- Fumigation Site Monitoring
- Response Information for Neighbors



## *Soil Fumigant Application Management Plan*

### **Must include:**

#### **Notice to State Lead Agency and Tribal Agencies**

- If your state and/or tribal lead agency requires notice, list contacts that were notified:
- Date notified:



## *Soil Fumigant Application Management Plan*

### **Must include:**

### **Communication Plan Between Applicator, Land Owner/Operator, and Other On-site Handlers**

- Plan for communicating to the land owner/operator and all on-site handlers (e.g., tarp cutters/removers, irrigators)
- Location and start/stop times/areas of buffer zones
- PPE Requirements
- Names and phone numbers of persons contacted:
- Date contacted:



## GAPs for Drip Application¶

### *Wind Speed¶*

• Wind speed at the application site *must* be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.¶

¶

### *Weather conditions¶*

• Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation *must* be checked to determine if unfavorable weather conditions exist or are predicted and whether fumigation should proceed.¶

• Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air-stagnation advisory in effect for the area in which the fumigation is planned.¶

• Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov>. For further guidance, contact your local National Weather Service Forecasting Office.¶

### *Identifying Unfavorable Weather Conditions¶*

• Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions and cause injury to humans, animals or property. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.¶

¶

### *Soil Conditions¶*

• Soil must be in good tilth and free of large clods at the surface. If subsurface soil compaction layers (hardpans) are present within the intended fumigation treatment zone, a deep tillage to fracture these layers must occur prior to the soil fumigant application.¶

• Field residue and stubble must be worked into the soil with little or no crop residue present on

GAPs for  
Application of  
Metam Sodium,  
12 pages in all

OnePlan PAR  
compresses the  
information into  
11 simple  
questions

# To meet EPA guidelines a second page is required on all workorders for FMPs to include Soil Fumigation specific requirements.

## OnePlan Pesticide Application & Soil Fumigation Recordkeeping

### Soil fumigation workorder specification - page 2

Workorder number: 1111281

Applicator: Wayne Newbill Lic. no. 54321

Application Type: Shank Injection (12 in. depth)

Scheduled application: Nov. 28, 2011 9:00 AM to 6:00 AM

[Edit schedule, fields, etc. for this workorder](#)

#### ☐ Emergency Response Plan

An emergency response plan is required. A sample template ([Word .doc](#) or [PDF](#)) showing its necessary information is available.

#### ☐ Handler Information and Training

All handlers directly or indirectly involved with this application, or who will be in contact with the application within 48 hours after the application period must have had fumigation safety training within the past 12 months. The EPA has [safety information for soil fumigant handlers](#), and the [handler setup form](#) in this application provides for recording handler training information.

<input type="checkbox"/>	Select handlers
<input type="checkbox"/>	Bob Jones
<input type="checkbox"/>	Bob Jones

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You are logged in  
as oneplan

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[Operation summary](#)

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[EPA Soil Fumigant  
Toolbox](#)

[Emergency  
Preparedness and  
Response  
Requirements \(EPA  
document\)](#)

[Emergency  
response plan  
template \(.doc\)](#)

[Emergency  
response plan  
template \(PDF\)](#)



An Emergency Response Plan template is provided

<b>VI. Emergency Response Plans</b>		
Description of evacuation routes (a diagram or drawing may be attached to the FMP): <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> Check here if diagram or drawing is attached		
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Locations of telephones: <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>		
Contact information for first responders: <input type="checkbox"/> <input type="checkbox"/>	Local/state/federal contacts: <input type="checkbox"/> <input type="checkbox"/>	Other contact information for emergencies: <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Emergency procedures/responsibilities in case of an incident, equipment tarp/seal failure, complaints or elevated air concentration levels suggesting potential problems, or other emergencies: <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<b>VII. Communication Between Applicator, Owner/Operator, and Other On-site Handlers</b>		
<input type="checkbox"/> Pesticide product labels and material safety data sheets are at the application site and available for employees to review. <input type="checkbox"/>		
<input type="checkbox"/>		
Will the certified applicator be at the application site during all handler activities that take place from the beginning of the application until the entry restricted period expires? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		
<input type="checkbox"/>		
If no, describe how the certified applicator will share the label requirements with owner/operator and/or handlers who will be present at the application site after the application is complete until the entry restricted period expires. <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

# Links to Fumigant Handler information is provided



U.S. ENVIRONMENTAL PROTECTION AGENCY

## Pesticides: Reregistration



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You are here: [EPA Home](#) » [Pesticides](#) » [Regulating Pesticides](#) » [Reregistration](#) » [Pesticide Reregistration Status](#) » [Soil Fumigants](#) » Safety Information for Soil Fumigant Handlers

## Safety Information for Soil Fumigant Handlers

Current as of April 2011

This page includes Fumigant Safe Handling information for soil fumigant handlers. As stated on updated fumigant product labels, certified applicators must provide Fumigant Safe Handling information to each handler involved in the application, or confirm that each handler participating in the application has received Fumigant Safe Handling information in a manner they can understand within the past twelve months. Fumigant Safe Handling information is provided where fumigant products are purchased. (**NOTE:** This page also referenced as [www.epa.gov/fumiganttraining](http://www.epa.gov/fumiganttraining))

### EPA Materials

- [Safety Information for Handlers of Pesticide Soil Fumigants \(PDF\)](#) (2 pp, 315k) ([about PDF](#)) (EPA brochure, November 2010)
- [Informacion de Seguridad para los Manipuladores de Pesticidas de Fumigantes del Suelo \(PDF\)](#) (2 pp, 181k) ([about PDF](#)) (EPA brochure, Spanish language version, November 2010)

### Materials Produced by Pesticide Registrants and Approved by EPA

- [Paladin® \(Dimethyl Disulfide, DMDS\) Fumigant Safe Handling Guide \(PDF\)](#) (2 pp, 40.84k) ([about PDF](#)) (Arkema Inc., April 2011)
- [Guia para la manipulacion segura de fumigantes, Paladin \(Dimetil disulfuro o DMDS\) \(PDF\)](#) (2 pp, 43.04k) ([about PDF](#)) (Arkema Inc. brochure, Spanish language version, April 2011)
- [Paladin® EC \(Dimethyl Disulfide, DMDS\) Fumigant Safe Handling Guide \(PDF\)](#) (2 pp, 41.17k) ([about PDF](#)) (Arkema Inc., April 2011)
- [Guia para la manipulacion segura de fumigantes, Paladin EC \(Dimetil disulfuro o DMDS\) \(PDF\)](#) (2 pp, 43.40k) ([about PDF](#)) (Arkema Inc. brochure, Spanish language version, April 2011)
- [Methyl Bromide and Chloropicrin Safety Information for Handlers \(PDF\)](#) (64 pp, 335.52k) ([about PDF](#)) (The Chloropicrin Manufacturers' Task Force and The Methyl Bromide Industry Panel, December 2010)

Pesticides Home  
Regulating Pesticides Home  
Reregistration Home  
About Reregistration  
Product Reregistration  
Public Participation  
Reregistration Status  
Progress & Status Reports

# Select the appropriate soil type and organic content

## Links to soil references are provided

### ☒ Soil conditions

Soil texture:  (See [the textural triangle](#) for more info.)

Soil organic content:

Soil moisture must be  capacity at the start of the fumigant application. Refer to [feel and appearance method](#) for estimating soil moisture.

Soil must be in good condition. If there are clods, any subsoil compaction layers must be broken to allow proper distribution of fumigant through profile. Crop residue must not extend through the soil surface.

Soil temperature must not exceed 90°F (at 3" depth) during the application.

If the air temperature has exceeded 100°F in the 3 days prior to the start, measure the soil temperature:  °F

A link is provided to get the required site specific weather forecast for the application area

☒ **Weather Conditions**      NWS point-based forecast and observations

Minimum wind speed at the start of the application is 2 mph, or the forecast must show wind of 5 mph or greater during the application period.

There must be no temperature inversion or air stagnation advisory forecast for more than 18 hours during the 48 hours after the start of application.



# 3 Miles SSE Middleton ID



Enter Your "City, ST" or zip code

Go

BOOKMARK



NWS Boise, ID

**Point Forecast:** 3 Miles SSE Middleton ID

43.66°N 116.59°W (Elev. 2476 ft)

[Mobile Weather Information](#) | [En Español](#)

**Last Update:** 8:11 am MST Nov 28, 2011

**Forecast Valid:** 12pm MST Nov 28, 2011-6pm MST Dec 4, 2011

## Forecast at a Glance

**This  
Afternoon**



Mostly  
Sunny  
Hi 48 °F

**Tonight**



Mostly  
Clear  
Lo 28 °F

**Tuesday**



Mostly  
Sunny  
Hi 47 °F

**Tuesday  
Night**



Partly  
Cloudy  
Lo 33 °F

**Wednesday**



20%  
Slight Chc  
Showers  
Hi 42 °F

**Wednesday  
Night**



Partly  
Cloudy  
Lo 23 °F

**Thursday**



Mostly  
Sunny  
Hi 36 °F

**Thursday  
Night**



Partly  
Cloudy  
Lo 22 °F

**Friday**



Mostly  
Sunny  
Hi 39 °F

## Detailed 7-day Forecast

**This Afternoon:** Mostly sunny, with a high near 48. Calm wind.

**Tonight:** Mostly clear, with a low around 28. Light and variable wind.

**Tuesday:** Mostly sunny, with a high near 47. South southeast wind between 3 and 6 mph.

**Tuesday Night:** Partly cloudy, with a low around 33. East southeast wind at 6 mph becoming west.

**Wednesday:** A 20 percent chance of showers. Partly sunny, with a high near 42. Northwest wind between 8 and 14 mph.

**Wednesday Night:** Partly cloudy, with a low around 23.

**Thursday:** Mostly sunny, with a high near 36.

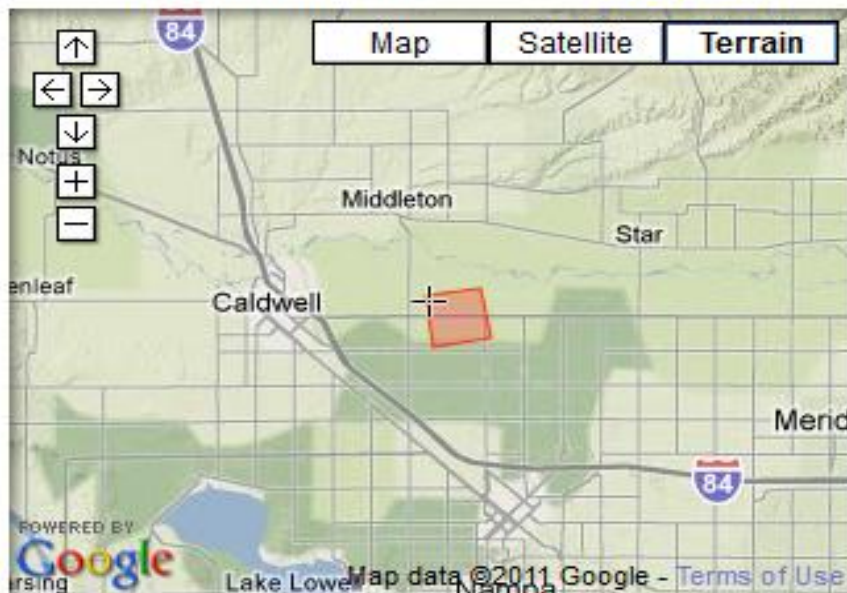
**Thursday Night:** Partly cloudy, with a low around 22.

## Detailed Point Forecast

[\[Move Down\]](#)

[Click Map for Forecast](#)

[Disclaimer](#)



Requested Location Forecast Area  
Lat/Lon: 43.66°N 116.59°W Elevation: 2476 ft

# GAP Checklist provided

## ☑ **Good Agricultural Practices (GAPs) required**

- Daily, before using a fumigation rig, the operator must check:
  - o the filter, and clean or replace the filter element as required;
  - o all tubes and chisels to make sure they are free of debris and obstructions;
  - o check and clean the orifice plates;
  - o check application equipment is in good working order.
- All systems must have a constant pressure system with orifice plates or nozzles to insure the proper amount of fumigant is applied.
- The fumigant injection system must contain a functional, automatic, quick-closing check valve to prevent the flow of fumigant back toward the fumigant container.
- All systems must include a filter to remove any particulates from the fumigant.
- All shields must be in place.
- All systems must be equipped with an individual tank monitoring system to detect flow problems in each individual tank.
- All tanks, hoses, fittings, valves and connections are tightened, sealed and not leaking,
- Allow lines to clear before lifting injectors from the soil.
- Do not apply or allow fumigant to drain onto the soil surface.
- Do not lift injection shanks from the soil until the shut-off valve has been closed.
- Dry connect fittings (in closed transfer systems) must be installed on all tanks and transfer hoses.
- Each injection line should have a check valve located as close as possible to the final injection point.
- Each nozzle or orifice must be equipped with a flow monitor, e.g. mechanical, electronic, or Redball type monitor.
- For undiluted product, aluminum, brass, copper, galvanized iron, and zinc materials cannot be used.





## Pesticides: Reregistration

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» Implementation of Risk Mitigation Measures for Soil Fumigant Pesticides

# Implementation of Risk Mitigation Measures for Soil Fumigant Pesticides

Current as of December 2010

## Soil Fumigant Toolbox

**Welcome** to the Soil Fumigant Toolbox which provides training, outreach, and other resource materials for applicators and handlers, communities, state and local agencies, and others interested in understanding and implementing the current requirements for safe use of soil fumigants. Learn what's new in the [toolbox](#).



[Pesticides Home](#)  
[Regulating Pesticides Home](#)  
[Reregistration Home](#)  
[About Reregistration](#)  
[Product Reregistration](#)  
[Public Participation](#)  
[Reregistration Status](#)  
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# Montana Extension Interest

- Montana Extension has expressed interest in OnePlan and its various components.
- They have been awarded a grant to customize existing technology to meet Montana's conservation needs.
- Teri has offered to meet with them via teleconference to further explore areas of mutual benefit.

# Executive Committee Meeting

- Teri called for a committee meeting in May.
- Committee members were updated on the status of the older modules and new developments on PAR and FMP.
- Members offered some ideas as to possible funding opportunities, primarily for NMP, that we continue to flesh out.

Thank You!

Questions?

